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Technical Report No. 86

**PHYSICAL, CHEMICAL, AND BIOLOGICAL
DATA FROM THE NORTHEAST PACIFIC OCEAN:
COLUMBIA RIVER EFFLUENT AREA,
JANUARY - JUNE 1961**

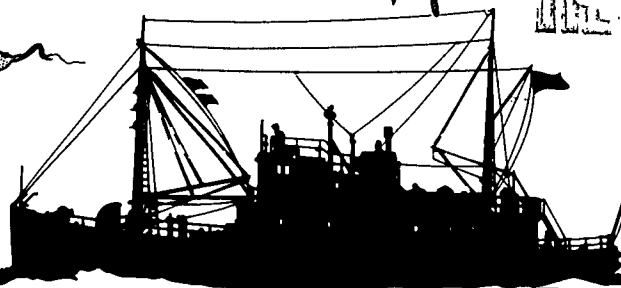
Prepared by
The Data Analysis Section,
Supervised by C. M. Love

Scientific program
Under the general direction
of
CLIFFORD A. BARNES

U.S. Atomic Energy Commission
Contract No. AT(45-1)-1385
AT(45-1)-1725

and
Office of Naval Research
Contract Nonr-477(10)
Project NR 083 012

Reference M63-13
July 1963



SEATTLE 5, WASHINGTON

UNIVERSITY OF WASHINGTON
DEPARTMENT OF OCEANOGRAPHY
Seattle 5, Washington

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RICHARD H. FLEMING
Chairman

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TABLE OF CONTENTS

	Page
INTRODUCTION	1
Vessel Operation and Types of Observations	1
Collection of Samples	2
Determination and Accuracy of Properties	3
Miscellaneous Comments	5
Recent University of Washington Publications Containing Offshore Oceanographic Data	6
Personnel	6
EXPLANATION OF DATA TABLES	8
Abbreviations and Headings Used in Data Tables	8
REFERENCES	14
DATA TABLES	19

LIST OF FIGURES

	Page
1. Chart of the Northeast Pacific Ocean showing area covered by the cruises reported in this volume	17
2. Station locations <u>Brown Bear</u> Cruise No. 275, 10-27 January, 1961	18
3. Station locations <u>Brown Bear</u> Cruise No. 280, 7-24 March, 1961	113
4. Station locations <u>Brown Bear</u> Cruise No. 282, 3-7 April, 1961	216
5. Station locations <u>Brown Bear</u> Cruise No. 287, 8-24 May, 1961	225
6. Station locations <u>Brown Bear</u> Cruise No. 288, 9-19 June, 1961	340

INTRODUCTION

This report contains oceanographic data collected on five offshore cruises of Research Vessel Brown Bear during the months of January to June, 1961. The cruises presented are numbers 275, 280, 282, 287 and 288, which were the first cruises of a series designed to provide data for a year-round study of the water characteristics along the Washington-Oregon coast with special emphasis on the fresh water entering the system from the Columbia River. The objectives of this study are to determine the gross features of the movement and dispersion of Columbia River effluent water in the open sea off the mouth of the river and along the adjacent coast, and ultimately to ascertain the probable fate of any radioactive material that might be associated with the effluent or with river-borne materials. Funds for this investigation are being provided by the United States Atomic Energy Commission under Contracts No. AT (45-1)-1385 and AT (45-1)-1725 and by the United States Office of Naval Research Contract Nonr-477(10), Project NR 083-012.

Vessel Operation and Types of Observations

The Brown Bear is based in Seattle, and all of the cruises described herein departed from and returned to that port.

Cruises 275, 280 and 287 were primarily for the purpose of obtaining physical, chemical and productivity data and zooplankton specimens in the area under study. Cruise 282 was a quick trip offshore to moor an experimental buoy on Cobb Seamount, but six oceanographic stations were also occupied. Cruise 288 served a dual purpose of collecting oceanographic data and providing instruction at sea for University of Washington students enrolled in the Summer Session course entitled "Field Experience in Oceanography". Figures 1-5 show the cruise tracks and station locations for the various cruises. Preliminary reports describing the work carried out have been issued for certain of these cruises (Love and Anderson, 1961, Lincoln and Dawson, 1961, Collias, 1961).

Temperature, salinity and dissolved oxygen were determined at all oceanographic stations. Productivity and chlorophyll measurements were obtained at 75 per cent of the oceanographic stations and at some additional "productivity only" stations. On most cruises these "productivity only" stations were designated by a number and a letter, such as 10-A, 12-D, etc. At 44 per cent of the stations, additional water samples were drawn for "special chemistry" analyses; namely, phosphate, silicate and nitrate.

In addition to the above mentioned data which are tabulated in this report, several other types of collections and observations were made during these cruises. On all cruises except 282, horizontal tows with Clarke-Bumpus samplers were made for collection of zooplankton samples. Such tows were usually made from four different depths in the upper 100 meters twice a day. The salinity-temperature deviation recorder was in continuous use during all of the cruises except 282. This instrument makes continuous recordings of the deviations of temperature and salinity of the near-surface water from selected base values. The water sampled is pumped through a sea water intake located in the ship's side, approximately eight feet below the water line. Other routine observations were mechanical bathythermograph and/or electronic bathythermometer

lowerings at each station, and the lowering of a 12-inch (30.5 cm) Secchi disc at each daylight station where productivity measurements were made. Underway bathythermograph lowerings were made during some cruises. On all cruises except 282, continuous measurements and recordings of solar radiation were made.

Zooplankton and water samples were collected on behalf of the Laboratory of Radiation Biology, University of Washington. The zooplankton samples were collected with half-meter nets, using horizontal or oblique tows. The water samples were five gallons each and collected from the surface and/or near the bottom, usually at stations near the mouth of the Columbia River. The water and plankton samples were analyzed by the Laboratory of Radiation Biology for the amounts of certain gamma-emitting radionuclides present, Zn^{65} , Cr^{51} , P^{32} , Np^{239} , and K^{40} . Gross beta-ray counts were also made on the samples.

During Cruise 288, gravity cores were obtained at five stations and 18 mid-water trawl samples were collected.

Collection of Samples

There was no fixed sequence of station operations during these cruises. However, a typical order of procedure was as follows: deep oceanographic cast, one or two casts for chlorophyll and productivity samples, shallow oceanographic cast, two Clarke-Bumpus tows. Lowerings of the electronic bathythermometer and/or mechanical bathythermograph were made while the bottles and attached thermometers were coming to equilibrium on the deep and shallow casts.

Nansen bottles were used to obtain the water samples for salinity and oxygen analyses. Chlorophyll and productivity samples were collected with modified Van Dorn plastic samplers (Van Dorn, 1957). Some of the special chemistry samples were obtained from the Nansen bottle casts whereas others were taken from the plastic samplers. An indicator column in the data tables tells which sampler was used.

In general, two different schemes of sampling depths were used. At stations near shore or in the vicinity of the low salinity water from the Columbia River, or other sources, the Nansen bottles were more closely spaced than usual in the upper 100 meters to pick up details of the salinity structure. The sampling depths used in these cases were 0, 3, 6, 10, 15, 20, 25, 30, 40, 60, 80, and 100 meters. At other locations fewer bottles were used in the upper layer.

The sampling depths for chlorophyll and productivity samples corresponded to 100, 50, 10 and 1 per cent of surface illumination. These depths were computed from extinction coefficients as obtained from Secchi disc measurements using the formula $K = \frac{1.7}{SECDI}$ where K is the extinction

coefficient and SECDI is the depth in meters to which the Secchi disc could be seen (Poole and Atkins, 1929).

Determination and Accuracy of Properties

Two protected reversing thermometers were used on each Nansen bottle. In addition, except on Cruise 288, the bottom seven or eight bottles each carried one unprotected reversing thermometer. This arrangement provided that on deep casts (usually 200 meters and deeper) all the bottles carried an unprotected thermometer, and that on shallow casts, usually all bottles at 125 meters or deeper also carried unprotected thermometers. On Cruise 288 the thermometer arrangement was somewhat different, and two of the bottles normally used on the deep cast did not carry unprotected thermometers.

The temperatures shown are in most cases the average of two protected thermometer readings after application of the usual expansion and index corrections. A study was made to determine the extent of agreement within the pairs of corrected thermometer readings recorded during these five cruises. Based on the total number of pairs of readings for all these cruises, the following table shows the percentage of cases where the value tabulated in the "Temperature" column of the station data is the average of two readings that differed by 0-0.05°C, by 0.06-0.10°C, or by more than 0.10°C, and also the percentage of cases where the temperature is based on one thermometer reading only, due to thermometer malfunction or other causes:

Difference between protected thermometer readings			One thermometer reading only
0 - 0.05°	0.06° - 0.10°	> 0.10°	
92.3%	3.4%	0.8%	3.4%

The depths of subsurface observations were calculated from measured wire angles; from readings of unprotected reversing thermometers; and from smoothed curves of wire length minus thermometric depth (L-Z) versus wire length (L), the difference method described by LaFond (1951).

The salinity determinations were run with the University of Washington salinometer (Paquette, 1958). Some were run aboard ship and some ashore, as follows: Cruises 275 and 280, partly aboard ship and partly ashore; Cruises 282 and 287, all run ashore; Cruise 288, all run aboard ship. The values obtained have a reproducibility of ± 0.004 ‰ salinity at the 95 per cent probability level and a probable accuracy of ± 0.01 ‰ salinity or better at the same level of probability.

Dissolved oxygen was obtained by the modified Winkler method described by Thompson and Robinson (1939). All the analyses were run aboard ship.

Phosphate values were obtained by the method of Wooster and Rakestraw (1951), except that the color intensities were measured with a Beckman spectrophotometer model DU, and a constant temperature bath set at 27° Celsius was used to bring all samples and standards to the same temperature. The water samples were obtained from frozen samples on all cruises except Cruise 288, these were run both aboard ship and ashore.

Silicate values were obtained by the molybdenum blue method of Mullin and Riley (1955a), except that sodium silicofluoride was used to prepare the standard solutions. All analyses for silicate were run ashore using water from the frozen samples.

Nitrate values were obtained using the method of Mullin and Riley (1955b) with a few minor changes in the procedure of addition of reagents. All analyses were run ashore using water from frozen samples.

The chlorophyll samples were analyzed according to the method of Richards with Thompson (1952) as modified for use with the Millipore® filter (Greitz and Richards, 1955). A turbidity correction was made by subtracting the extinction at 7500 Å from spectrophotometer readings at other wave lengths (Strickland and Parsons, 1960). The error in the technique is reported to be about $\pm 5\%$. An IBM machine was used to process the data.

The radiocarbon method was used for productivity measurements (Steemann Nielsen, 1952). The error in the method is about $\pm 10\%$ (Strickland and Parsons, *loc. cit.*). Approximately 2.5 microcuries of radioactive carbonate $C^{14}O_3^{2-}$ were added to sea water samples in 125 ml light and dark pyrex reagent bottles. Incubator measurements were made under constant illumination of about 800 foot-candles, using a bank of "Cool-White" fluorescent lights. Temperature was controlled with running surface sea water. After three to six hours of incubation, the samples were filtered on PH Millipore filters ($0.3 \pm 0.02 \mu$) and stored over silica gel. Simulated *in situ* measurements were generally made twice daily, at dawn and at noon. Samples were incubated in a topside deck incubator exposed to full sunlight illumination. Kodak Wratten neutral density filters were used to simulate conditions of 50, 10 and 1 per cent of surface illumination. Temperature was controlled by running surface sea water. Periods of incubation were either from sunrise to noon or noon to sunset. Usually, only a surface sample was incubated during the sunrise to noon period.

In the laboratory, the filters retaining the C^{14} were fumed with concentrated HCl for 10-15 minutes to remove traces of inorganic C^{14} . Geiger counting equipment consisted of a Nuclear-Chicago Model D-47 gas flow counter with micromil window, 161-A scaler, C-110 automatic sample changer and C-111B printing timer. Each sample was counted until a minimum number of 1280 total counts was obtained. IBM processing of the data included corrections for background, dark bottle uptake, variations in inorganic carbon content of sea water, coincidence, and isotope effect (5%).

The following quantities were computed with the IBM 709 Data Processing System at the Research Computer Laboratory of the University of Washington: the interpolated values of temperature, salinity, and oxygen at standard oceanographic depths; the interpolation error for each of the above quantities; the density of sea water at atmospheric pressure as sigma-t (σ_t), for interpolated values; the specific volume anomaly ($10^5 \delta$); and the geopotential anomaly ($\Sigma \Delta D$). Sigma-t for observed values was computed on the IBM 650 Magnetic Drum Data Processing Machine. Programs developed at the Department of Oceanography were used. The interpolation program is based on two three-point Lagrange parabolic interpolation polynomials (Buckingham, 1957). This interpolation scheme yields two estimates

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of the interpolated value of a property at each standard depth. The first polynomial makes use of two observed values from depths above the desired standard depth and one value from a depth below; the second polynomial uses one value above and two below. The resulting interpolated value is the numerical average of the two estimates. The error of interpolation is equal to the difference in magnitude between the two Lagrange interpolation polynomials times a factor depending on the third derivatives. This factor is given the value 0.33 in this computer program. The derivation of the error term is given by Buckingham (1957). A discussion of this system of interpolation and error determination and a derivation of the value 0.33 for the factor is given by Rattray (1962). The equations for sigma-t were taken from LaFond (1951), and the equations for specific volume anomaly and geopotential anomaly were those used by the U. S. Navy Hydrographic Office in their computer program (U. S. Navy Hydrographic Office, 1955b). With a few local exceptions, the procedures described in H. O. Special Publication No. 12, Part III (U. S. Navy Hydrographic Office, 1960) were used for coding and punching the data on IBM cards.

The interpolation program formerly used by this Department made use of only one three-point interpolation. This occasionally led to incorrect machine-interpolated values at certain standard depths, especially if the distribution of observed values was not adequate to properly define the curve in that region. The use of two interpolation polynomials in the new computer program substantially reduces the chance of obtaining such incorrect values. Furthermore, the magnitude of the error terms may be taken by the reader as an indication of whether the arrangement of sampling depths used was adequate to portray the vertical distribution in sufficient detail.

The geographical positions are based on navigational fixes obtained by the watch officers of the Brown Bear. At locations within 18 miles of shore, the fix was usually obtained from radar ranges and bearings; beyond that distance Loran was used. In the area in which these cruises operated the error of Loran fixes is considered not to exceed one mile. In most cases a fix was obtained immediately upon arrival on station, and another obtained prior to departure from station. Occasionally one or more fixes were also obtained at intermediate times while on station. The positions reported herein are usually "mean" positions, determined graphically, lying between the arrival and departure fixes, and taking into account any intermediate fixes obtained.

Miscellaneous Comments

The station numbers used on Brown Bear cruises consist of two parts: the cruise number, a dash, then a number representing the consecutive number of the station within the cruise, viz., 275-1, 275-2, etc. By the use of this system, each station of each cruise is uniquely identified.

The data tables contain a few apparently anomalous values of various properties which do not fit on a smooth curve of the particular property versus depth. These questionable values are marked with an asterisk (*). They have been checked to the extent that existing original data sheets, work sheets, and other information will allow and cannot be proved incorrect.

Recent University of Washington Publications Containing Offshore

Oceanographic Data

This list continues the one presented in Technical Report No. 66.

<u>Report No.</u>	<u>Reference No.</u>	<u>Contains Data Collected</u>
Technical Report No. 66	60-18	Northeast Pacific, April 1956 to April 1958
Technical Report No. 69	M61-24	Chukchi and Bering Seas, Summers of 1959, 1960

Personnel

AT SEA

The following persons were members of the scientific staff on one or more of these cruises. Unless otherwise noted, all personnel are staff members or students in the Department of Oceanography.

<u>Name</u>	<u>Title or Organization</u>	<u>Cruise No.</u>
Almasi, Michael	Electronics Engineer	282
Andersen, Norman K.	Research Assistant	288
Anderson, Dr. George C.	Research Assistant Professor	275, 280
Barton, Ralph F.	Marine Aide	288
Beamish, Neil E.	Marine Aide	275, 280
Broenkow, William W.	Research Assistant	288
Coachman, Lawrence K.	Predoctoral Associate	280
*Collias, Eugene E.	Senior Oceanographer	288
Connolly, Joel I.	Marine Technician	275, 287
Dawson, William A.	Research Instructor	287
*Dermody, John	Senior Oceanographer	280
Falls, Paul	Research Assistant	288
Goff, William J.	Research Assistant	288
Griswold, Charles E.	Marine Technician	275, 280, 287
Gucluer, Lt. Sevkett M.	Student	288
Heniffin, Lt. Edward E.	Student	288
Henson, Fred D.	Senior Marine Technician	280
Hobson, Louis A.	Research Assistant	275
Hopkins, Robert S.	Marine Technician	287, 288
Horner, Rita A.	Assistant Oceanographer	275, 280
Hulbert, David W.	Marine Technician	275
Johnston, Allan H.	Marine Aide	288
Jossi, Jack W.	Research Assistant	288
Kral, Lt. Anthony J.	Student	288
*Lincoln, John H.	Senior Oceanographer	287
Loskota, Anthony R.	Oregon State University	280

*Love, Cuthbert M.	Senior Oceanographer	275
Miller, Donald A.	Marine Technician	287
*Morse, Betty-Ann	Assistant Oceanographer	275, 280, 282
Olofson, Clifford	Marine Technician	287
Overstreet, Roy	Teaching Assistant	288
Raiche, John G.	Marine Technician	282
Rao, Ramana K.	Research Assistant	288
Reynolds, Betty R.	Laboratory Assistant	280
Richards, Dr. Francis A.	Associate Professor	288
Roberts, Kenneth E.	Marine Technician	287
Semon, Darrelyn	Assistant Oceanographer	275, 280, 287, 288
Stevens, John W.	Assistant Oceanographer	288
Sweetland, Russell F.	Marine Technician	275, 280, 287
Sykes, Lt. Lewis B.	Student	288
Syrotuck, William G.	Electronic Technician	282
Wiegand, Allen P.	Student Helper	275

The Brown Bear was under the command of Captain Franklin W. Princehouse.

*Indicates cruise leader (Party Chief)

ASHORE

The following persons, as well as some of the sea-going personnel, were engaged ashore in the analyses and preparation of these data for publication:

Aagaard, Knut	Research Assistant
Corr, Michael	Marine Aide
Edenso, Jim	Tab Machine Operator
Garnjobst, Joan M.	Marine Aide
King, Alma R.	Secretary-Typist
Lightwood, Keith G.	Assistant Engineer
Long, Linda K.	Laboratory Technician
Melton, Robert J.	Marine Aide
Milne, David H.	Research Assistant
Nigro, Nicholas D.	Marine Technician
Riley, Ralph W.	Marine Chemist
Rona, Monique R.	Programmer
Shafer, Thayer C.	Research Assistant
Van Dyke, Craig	Marine Aide
Wallin, Marsha M.	Keypunch Operator

EXPLANATION OF DATA TABLES

The information in the data tables was transcribed directly from IBM cards using an IBM Type 407 accounting machine. A blank space in the tables or headings indicates that no observation was taken. The original data and the interpolated and computed values punched on the cards were recorded or coded in accordance with the procedures used by the U. S. Navy Hydrographic Office (1960). The codes used to describe weather and sea conditions, etc., will be found in H. O. Publication No. 606-C (U. S. Navy Hydrographic Office, 1956) and H. O. Publication No. 607 (U. S. Navy Hydrographic Office, 1955a). Some changes were made in the card form but these do not affect the arrangement of the data in this report. Abbreviations and column headings are described below and, where necessary, the Hydrographic Office numerical codes have been reproduced to aid in interpreting the data.

Abbreviations and Headings Used in Data Tables

DATE	Greenwich month/day/year
HR (Hour)	Greenwich mean time to the nearest hour of the messenger drop on the <u>shallow</u> cast. If the messenger drop occurred at exactly 30 minutes after the hour, the time was rounded to the nearest even hour.
LAT (Latitude)	In degrees and minutes
LONG (Longitude)	In degrees and minutes
SDG (Depth of water)	Depth of water in meters at the station as determined by the ship's echo sounder. This depth was generally recorded immediately after the ship arrived on station.
WEA (Weather)	State of the weather. See code, page 13.
SECDI (Water transparency)	Depth in meters to which a 12-inch (30.5 cm) Secchi disc could be seen on daylight stations.
BA (Barometric pressure)	To obtain the barometric pressure in millibars, add 900 if this number is above 50; add 1000 if below 50.
CL AMT (Cloud type and cloud cover)	Cloud type, see code, pages 11 and 12. Cloud cover, see code, page 12.
DRY (Air temperature, dry bulb)	In degrees Celsius
WET (Air temperature, wet bulb)	In degrees Celsius

RELHU (Relative humidity) Expressed in per cent

VIS (Visibility) Range of visibility. See code, page 12.

WVEL DIR
(Wind velocity and direction) Wind velocity in meters per second. Wind direction, see code, page 12.

SEA DIR State of the sea, see code, page 12. Direction (Sea state and direction) from which sea was coming, see code, page 12.

SWL DIR
(Swell amount and direction) Height and wave length of swell, see code, page 14. Direction from which swell was coming, see code, page 12.

BTMCODE (Bottom type) See code, page 14.

WA (Wire angle) In degrees. Wire angles are tabulated only for those casts whose numbers appear in the "Cast" column at the left of the page, i.e., casts from which data were obtained. The first number is the wire angle for Cast 1, or the lowest numbered cast appearing, the second for Cast 2, etc. Dashes (---) indicate the wire angle was not recorded for that cast.

CAST Cast number

DEPTH Depth in meters from which sample was obtained.

TEMP (Temperature) In degrees Celsius

SAI (Salinity) In parts per thousand (‰).

Sigma-T (σ_t) An expression for the density of sea water at atmospheric pressure, having the indicated temperature and salinity. To convert sigma-t values to density, divide by 1000 and add 1; thus sigma-t 22.42 = density 1.02242.

OXY (Dissolved oxygen) In milliliters per liter (ml/l).

PHOS (Phosphate-phosphorus) In microgram-atoms per liter ($\mu\text{g-at/l}$)

SIL (Silicate-silicon) In microgram-atoms per liter ($\mu\text{g-at/l}$)

NITR (Nitrate-nitrogen) In microgram-atoms per liter ($\mu\text{g-at/l}$)

CHL-A (Chlorophyll a) In milligrams per cubic meter

PROD-I (Incubator productivity) Expressed as milligrams carbon assimilated per cubic meter per hour.

PROD-S (Simulated <u>in situ</u> productivity)	Expressed as milligrams carbon assimilated per cubic meter per day.
SP VOL ANOMALY (Specific volume anomaly, $10^5 \delta$)	The anomaly of specific volume of water at the indicated temperature, salinity, and pressure compared to a standard water of 0°C temperature and 35 ‰ salinity at the same pressure. (The depth in meters is taken as numerically equal to the pressure in decibars.) Tabular values multiplied by 10^{-5} will give the anomaly in units of cubic centimeters per gram.
GEPOT ANOMALY (Geopotential anomaly, $\Sigma \Delta D$)	Geopotential anomaly in dynamic meters of the layer of water between the surface and the indicated depth. (The depth in meters is taken as numerically equal to the pressure in decibars.)
E(T) (Temperature interpolation error)	Interpolation error, in degrees Celsius, of the temperature value at this depth. For a discussion of the interpolation error, see page 5. Dashes (---) in this column indicate that the interpolated value at this depth is based on one interpolation polynomial only and therefore the error could not be determined. A blank space in this column indicates no interpolation was made because the observed depth corresponded to the desired standard depth.
E(S) (Salinity interpolation error)	Interpolation error, in parts per thousand, of the salinity value at this depth. See comments under E(T) above.
E(O) (Oxygen interpolation error)	Interpolation error, in milliliters per liter, of the oxygen value at this depth. See comments under E(T) above.
A,C,E,P,M	"Indicator" letters which have the meanings defined below.
A	All of the observed values at this depth were obtained from the productivity cast, using modified Van Dorn plastic samplers. See page 2.
C	Special chemistry values (phosphate, silicate and nitrate) at this depth, as well as chlorophyll and productivity values were obtained from the productivity cast. All other values are from the Nansen bottle cast.

- E Chlorophyll and productivity values and special chemistry values, except phosphate, at this depth were obtained from the productivity cast. Phosphate and all other values are from the Nansen bottle cast. (This situation occurs only on four stations of Cruise 280.)
- P Only the chlorophyll and productivity values at this depth were obtained from the productivity cast. All other values are from the Nansen bottle cast.
- No indicator letter Indicates all values at that depth are from the Nansen (observed values) bottle cast.
- M The interpolated values at this depth are based on observed values from more than one cast (casts were "mixed").
- See WA (wire angle) or E(T), (Temperature interpolation error) for the meaning of dashes in these or other columns.
- * Indicates a questionable value. See page 5.

Codes Used for Reporting Observations

Taken from U. S. Navy Hydrographic Office Publication No. 606-C, "Hydrographic Office Observers Manual, Bathythermograph Observations" and U. S. Navy Hydrographic Office Publication No. 607, "Instruction Manual for Oceanographic Observations".

Cloud Type

Code

- | | |
|---|---|
| 0 | Stratus or fractostratus |
| 1 | Cirrus |
| 2 | Cirrostratus |
| 3 | Cirrocumulus |
| 4 | Alto cumulus |
| 5 | Altostratus |
| 6 | Strato cumulus |
| 7 | Nimbostratus |
| 8 | Cumulus or fractocumulus |
| 9 | Cumulonimbus |
| X | Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena. |

Amount of Cloud Cover (WMO Code 60)

Code

0	No clouds
1	Less than 1/10, or 1/10
2	2/10 and 3/10
3	4/10
4	5/10
5	6/10
6	7/10 and 8/10
7	9/10 and 9/10 plus
8	10/10
9	Sky obscured

Visibility

Code	Description	Objects not visible at:
0	Dense fog	50 yards
1	Thick fog	200 yards
2	Fog	400 yards
3	Moderate fog	1000 yards
4	Thin fog or mist	1 mile
5	Visibility poor	2 miles
6	Visibility moderate	5 miles
7	Visibility good	10 miles
8	Visibility very good	30 miles
9	Visibility excellent	over 30 miles

Direction (Compass Direction from which Wind, Sea, or Swell is coming)

Code

00	Calm, or no value
01 to 36	Each value represents 1/10 of the true direction in degrees, measured clockwise from the north, with 36 representing true north.

State of Sea - Wind Waves (WMO Code 75)

Code	Description	Height (Feet)
0	Calm (Glassy)	0
1	Calm (Rippled)	0 - 1/3
2	Smooth (Wavelets)	1/3 - 1 2/3
3	Slight	1 2/3 - 4
4	Moderate	4 - 8
5	Rough	8 - 13
6	Very Rough	13 - 20
7	High	20 - 30
8	Very High	30 - 45
9	Phenomenal	over 45

Note: The bounding height is to be assigned to the lower code, that is, a height of 4 feet is coded as 3.

NUMERICAL WEATHER CODES—PRESENT WEATHER

00	01	02	03	04	05	06	07	08	09
Cloud development NOT observed or NOT observed during past hour.	Clouds generally decreasing or increasing during past hour.	State of sky on the ground during past hour.	Clouds generally decreasing or increasing during past hour.	Visibility reduced by smoke.	Haze.	Visibility reduced by smoke or dust in suspension in the air, NOT caused by wind, at time of observation.	Dust or sand raised by wind, at time of observation.	Well developed dust devil(s) within past hour.	Outburst or sand storm within sight of station during past hour.
10 Light fog.	11 Patches of shallow fog at intervals of less than 5 feet on land.	12 Shore or lake fog, continuous, NOT deeper than 5 feet on land.	13 Lightning visible, no thunder heard.	14 Precipitation within sight, but NOT reaching the ground.	15 Precipitation without sight, reaching the ground, but distance from station.	16 Precipitation without sight, reaching the ground, near to station.	17 Thunder heard, but no precipitation at time of observation.	18 Squall(s) within sight during past hour.	19 Funnel cloud(s) with in sight during past hour.
20 Drizzle (NOT freezing rain) during past hour, but NOT at time of observation.	21 Rain (NOT freezing rain) during past hour, but NOT at time of observation.	22 Snow (NOT freezing rain) during past hour, but NOT at time of observation.	23 Rain or snow (NOT freezing rain) during past hour, but NOT at time of observation.	24 Freezing drizzle or freezing rain (NOT freezing rain) during past hour, but NOT at time of observation.	25 Showers of rain during past hour, but NOT at time of observation.	26 Showers of snow, or rain and snow, during past hour, but NOT at time of observation.	27 Showers of hail, or of rain and hail, during past hour, but NOT at time of observation.	28 Fog during past hour, but NOT at time of observation.	29 Thunderstorm (with or without rain or hail) during past hour, but NOT at time of observation.
30 Slight or moderate sandstorm or dust storm during past hour.	31 Slight or moderate sandstorm or dust storm during past hour.	32 Slight or moderate sandstorm or dust storm during past hour.	33 Severe sandstorm or dust storm during past hour.	34 Severe sandstorm or dust storm during past hour.	35 Severe sandstorm or dust storm during past hour.	36 Slight or moderate sandstorm or dust storm during past hour.	37 Heavy drifting snow, generally low.	38 Slight or moderate drifting snow, generally high.	39 Heavy drifting snow, generally high.
40 Fog at distance at time of observation, but NOT at station during past hour.	41 Fog in patches.	42 Fog, sky discernible, has become thicker during past hour.	43 Fog, sky NOT discernible, has become thicker during past hour.	44 Fog, sky discernible, no appreciable change during past hour.	45 Fog, sky NOT discernible, has begun or become thicker during past hour.	46 Fog, sky discernible, has begun or become thicker during past hour.	47 Fog, sky NOT discernible, has begun or become thicker during past hour.	48 Fog, sky discernible, fog dissipating, sky not discernible.	49 Fog, dissipating, sky not discernible.
50 Intermittent drizzle (NOT freezing rain) during past hour.	51 Continuous drizzle (NOT freezing rain) during past hour.	52 Intermittent drizzle (NOT freezing rain) during past hour.	53 Continuous drizzle (NOT freezing rain) during past hour.	54 Intermittent drizzle (NOT freezing rain) during past hour.	55 Continuous drizzle (NOT freezing rain) during past hour.	56 Light freezing drizzle.	57 Moderate or thick freezing drizzle.	58 Drizzle and rain, slight.	59 Drizzle and rain, moderate or heavy.
60 Intermittent rain (NOT freezing rain) during past hour.	61 Continuous rain (NOT freezing rain) during past hour.	62 Intermittent rain (NOT freezing rain) during past hour.	63 Continuous rain (NOT freezing rain) during past hour.	64 Intermittent rain (NOT freezing rain) during past hour.	65 Continuous rain (NOT freezing rain) during past hour.	66 Slight freezing rain.	67 Moderate or heavy freezing rain.	68 Rain or drizzle and snow, slight.	69 Rain or drizzle and snow, moderate or heavy.
70 Intermittent fall of ice pellets (sleet) during past hour.	71 Continuous fall of ice pellets (sleet) during past hour.	72 Intermittent fall of ice pellets (sleet) during past hour.	73 Continuous fall of ice pellets (sleet) during past hour.	74 Intermittent fall of ice pellets (sleet) during past hour.	75 Continuous fall of ice pellets (sleet) during past hour.	76 Ice needles (with or without fog).	77 Granular snow (with or without fog).	78 Isolated starlike snow crystals (with or without fog).	79 Ice pellets (sleet).
80 Slight rain shower(s).	81 Moderate or heavy rain shower(s).	82 Violent rain shower(s).	83 Slight shower(s) of rain and snow mixed.	84 Moderate or heavy shower(s) of rain and snow mixed.	85 Slight snow shower(s).	86 Moderate or heavy snow shower(s).	87 Slight shower(s) of sleet or rain and sleet mixed.	88 Moderate or heavy shower(s) of sleet or rain and sleet mixed.	89 Slight shower(s) of hail, with or without rain or sleet mixed, not associated with thunder.
90 Moderate or heavy rain or snow without rain or snow mixed, not associated with thunder.	91 Slight rain at time of observation, but NOT during past hour.	92 Moderate or heavy rain at time of observation, but NOT during past hour.	93 Slight snow or rain at time of observation, but NOT during past hour.	94 Moderate or heavy snow or rain at time of observation, but NOT during past hour.	95 Slight or moderate thunderstorm, with hail at time of observation, but NOT during past hour.	96 Slight or moderate thunderstorm, with hail at time of observation, but NOT during past hour.	97 Heavy thunderstorm, with hail at time of observation, but NOT during past hour.	98 Thunderstorm combined with duststorm or sandstorm at time of observation.	99 Heavy thunderstorm with hail at time of observation.

Swell Conditions

Code	Approx. Height in Feet	Description		Approx. Length in Feet
0	0	No swell		0
1 2	1 - 6	Low swell	Short or average Long	0 - 600 Above 600
3 4 5	6 - 12	Moderate	Short Average Long	0 - 300 300 - 600 Above 600
6 7 8	Greater than 12	High	Short Average Long	0 - 300 300 - 600 Above 600
9	---	Confused		

Bottom Type

Code	
0	Not otherwise specified
1	Mud or ooze
2	Sand and mud
3	Sand
4	Sand with shells and/or gravel
5	Shells
6	Gravel
7	Rock
8	Coral
9	Stone

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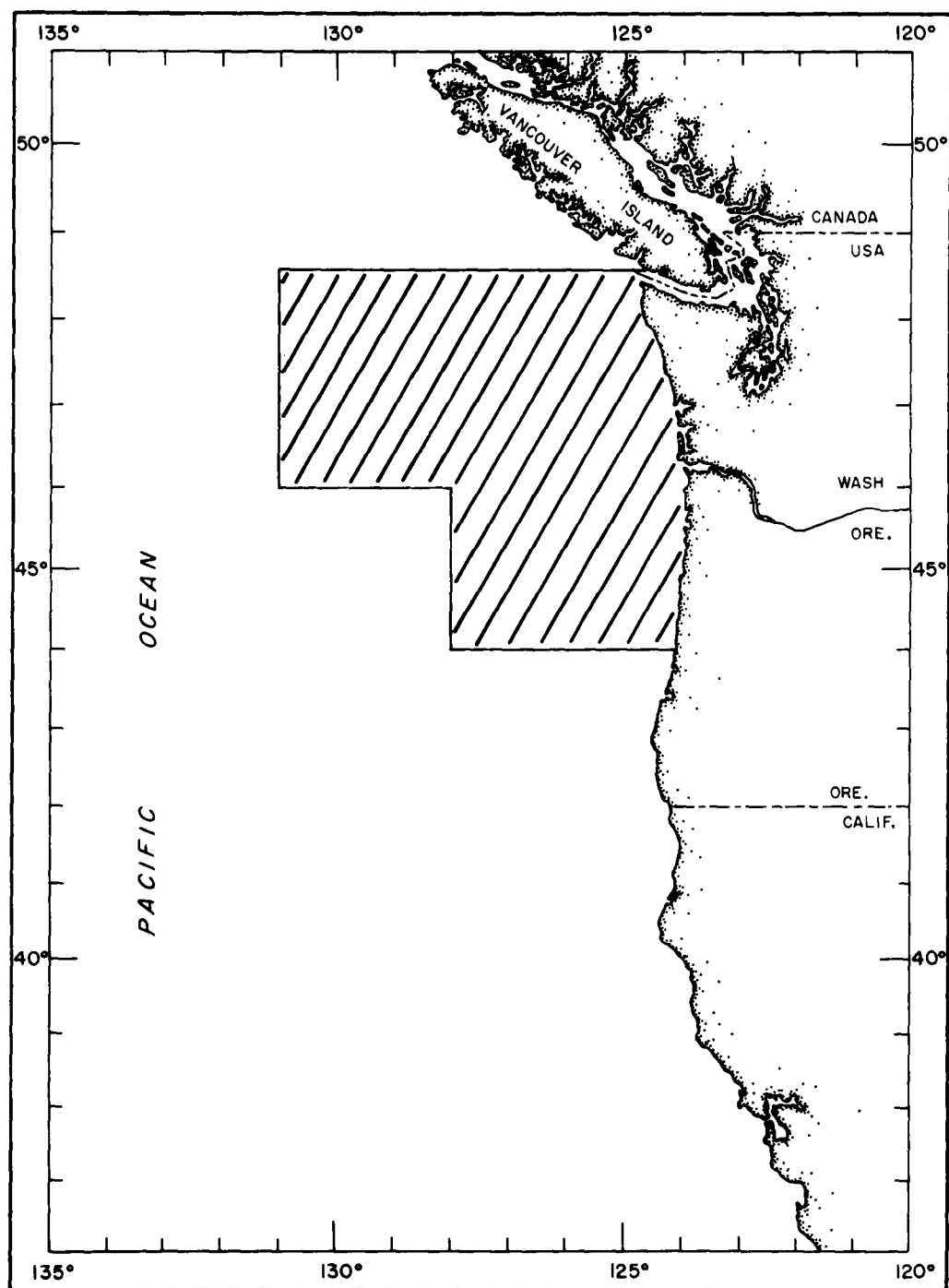


Fig. 1. Chart of the Northeast Pacific Ocean showing area covered by the cruises reported in this volume.

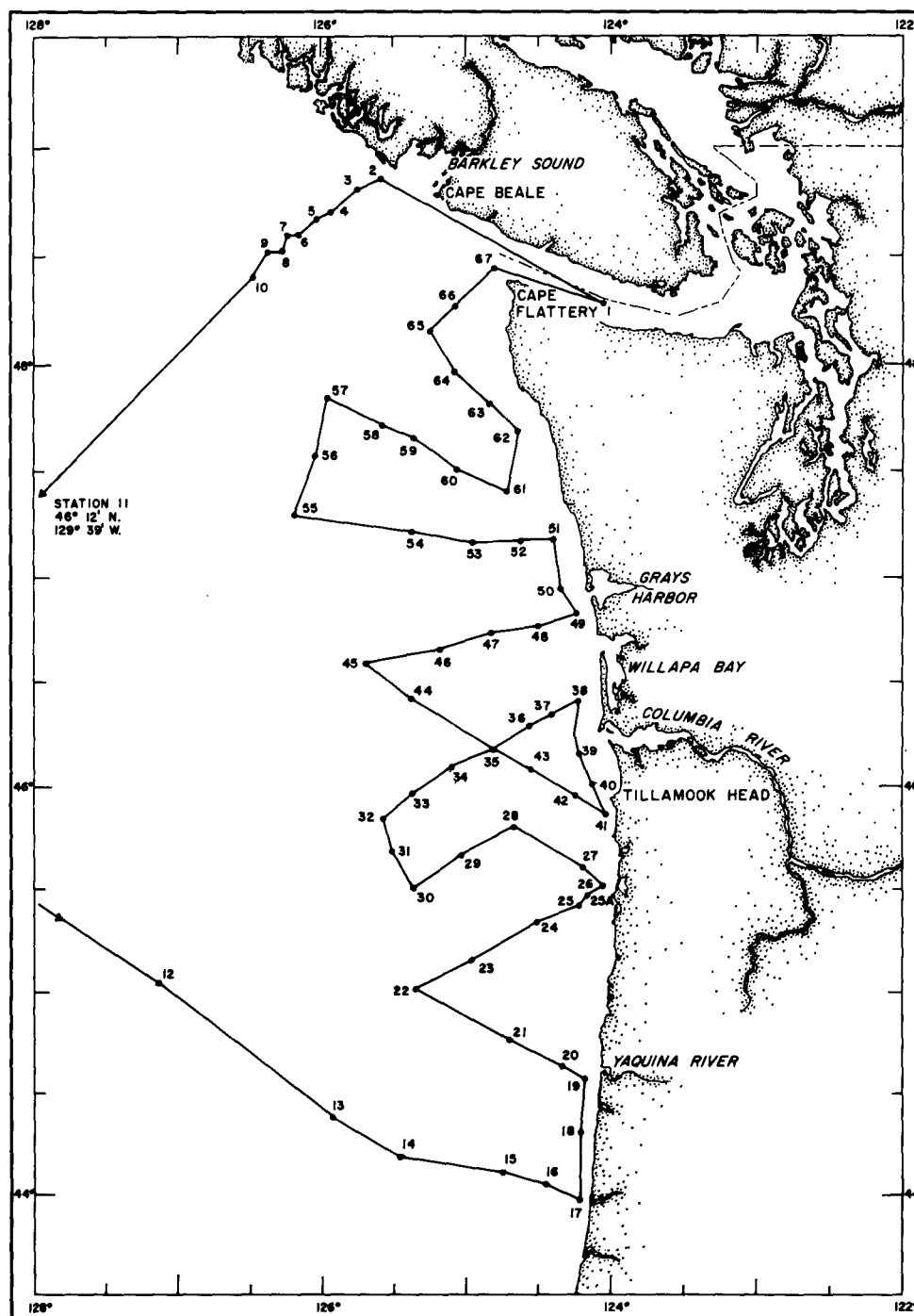


Fig. 2. Station locations Brown Bear Cruise No. 275, 10-27 January, 1961.

STATION 275-001 OBSERVED VALUES													
DATE	1/11/61	HR	08	LAT	48-17N	LONG	124-03W	SDG	103	WEA	20		
SECDI	BA	12	CL	X	AMT	DRY	WET	RELHU					
WVEL	5	DIR	06	SEA	0	DIR	06	SWL	0	DIR	16	WA	6
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	8.48	28.853	22.42	6.65				0.74	1.70			
A	3	8.42	29.386	22.84	6.52				0.53	0.88			
	4												
	6	8.28	30.012	23.35	6.42								
	10	8.19	30.239	23.54	6.22								
P	15	8.15	30.540	23.78	6.04				0.54	1.11			
	20	8.12	30.818	24.00	5.90								
	25	8.04	31.155	24.28	5.59								
	29	8.07	31.265	24.36	5.34								
A	30								0.38	0.92			
	39	8.06	31.292	24.38	5.23								
	58	8.08	31.372	24.44	5.17								
	77	8.12	31.562	24.58	5.11								
	96	8.16	31.610	24.62	5.04								
	121	8.27	31.956	24.87	4.75								
	145	8.51	32.563	25.31	4.34								
	174	8.44	33.221	25.83	3.68								

STATION 275-001 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANQMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.48		28.853		22.42	543.3	0.000	6.65	
10	8.19		30.239		23.54	436.0	0.049	6.22	
20	8.12		30.818		24.00	392.0	0.091	5.90	
30	8.07	0.00	31.269	0.003	24.37	356.8	0.128	5.35	0.02
50	8.07	0.00	31.339	0.009	24.42	353.0	0.199	5.17	0.02
75	8.12	0.00	31.543	0.004	24.57	338.7	0.286	5.12	0.00
100	8.17	0.00	31.645	0.001	24.64	332.3	0.370	5.01	0.00
150	8.53	---	32.682	---	25.40	261.1	0.518	4.24	---

STATION 275-002 OBSERVED VALUES

DATE 1/11/61 HR 20 LAT 48-52N LONG 125-35W SDG 46 WEA 65
 SECD1 BA 06 CL 0 AMT 8 DRY WET RELHU VIS 5
 WVEL 15 DIR 17 SEA 5 DIR 17 SWL 3 DIR 23 WA 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	3	9.17	31.318	24.24	6.34						
1	6	9.14	31.313	24.24	6.34						
1	10	9.16	31.318	24.24	6.32						
		9.12	31.311	24.24	6.32						
1	15	9.12	31.314	24.24	6.33						
1	19	9.10	31.331	24.26	6.27						
1	29	9.20	31.471	24.35	6.27						
1	38	9.28	31.692	24.51	6.22						

STATION 275-002 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.17		31.318		24.24	369.4	0.090	6.34	
10	9.12		31.311		24.24	369.4	0.037	6.32	
20	9.11	0.00	31.339	0.000	24.26	367.2	0.074	6.27	0.00
30	9.21	-.00	31.491	-.000	24.37	357.6	0.111	6.27	-.00

STATION 275-003 OBSERVED VALUES

DATE 1/11/61 HR 23 LAT 48-48N LONG 125-45W SDG 55 WEA 62
 SECDI BA 10 CL 6 AMT 7 DRY WET RELHU VIS
 WVEL 11 DIR 27 SEA 4 DIR 27 SWL 3 DIR 18 WA 20

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.48	31.883	24.63	6.27						
1	3	9.46	31.881	24.63	6.28						
1	6	9.47	31.884	24.63	6.27						
1	10	9.45	31.882	24.63	6.27						
1	14	9.47	31.888	24.63	6.27						
1	18	9.46	31.912	24.65	6.24						
1	23	9.47	31.915	24.65	6.24						
1	27	9.49	31.933	24.67	6.22						
1	37	9.54	32.063	24.76	6.22						
1	46	9.59	32.163	24.83	6.23						

STATION 275-003 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.48		31.883		24.63	332.1	0.000	6.27	
10	9.45		31.882		24.63	331.9	0.034	6.27	
20	9.46	0.00	31.914	0.002	24.65	329.9	0.067	6.24	0.00
30	9.50	0.00	31.967	0.005	24.69	326.8	0.100	6.22	0.00

STATION 275-004 OBSERVED VALUES

DATE 1/12/61 HR 02 LAT 48-43N LONG 125-55W SDG 73 WEA 01
 SEC DI BA 15 CL 6 AMT 3 DRY WET REL HU VIS 7
 WVEL 9 DIR 27 SEA 4 DIR 27 SWL 1 DIR 18 WA 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.23	32.261	24.96	6.08						
1	6	9.22	32.261	24.96	6.08						
1	10	9.22	32.260	24.96	6.07						
		9.20	32.260	24.97	6.07						
1	15	9.22	32.261	24.96	6.08						
1	20	9.22	32.263	24.97	6.08						
1	25	9.22	32.287	24.98	6.07						
1	30	9.24	32.319	25.01	6.07						
1	39	9.24	32.286	24.98	6.06						
1	49	9.40	32.407	25.05	5.90						
1	58	9.54	32.456	25.06	5.85						

STATION 275-004 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.23		32.261		24.96	300.3	0.000	6.08	
10	9.20		32.250		24.97	300.1	0.031	6.07	
20	9.22		32.263		24.97	300.3	0.061	6.08	
30	9.24		32.319		25.01	296.6	0.090	6.07	
50	9.42	---	32.415	----	25.05	292.5	0.149	5.89	---

STATION 275-005 OBSERVED VALUES

DATE 1/12/61 HR 04 LAT 48-40N LONG 126-01W SDG 104 WEA 02
 SEC DI 17 CL 6 AMT 2 DRY WET REL HU VIS 7
 WVEL 4 DIR 24 SEA 3 DIR 24 SWL 1 DIR 18 WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.60	32.405	25.02	6.28						
1	3	9.60	32.413	25.02	6.28						
1	6	9.60	32.408	25.02	6.28						
1	10	9.60	32.413	25.02	6.27						
1	15	9.60	32.406	25.02	6.27						
1	20	9.60	32.410	25.02	6.27						
1	25	9.59	32.413	25.02	6.28						
1	30	9.60	32.412	25.02	6.28						
1	40	9.58	32.411	25.02	6.27						
1	60	9.54	32.469	25.07	6.08						
1	80	9.16	32.822	25.41	4.89						
1	95	9.12	32.862	25.45	4.83						

STATION 275-005 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.60		32.405		25.02	295.2	0.000	6.28	
10	9.60		32.413		25.02	294.8	0.030	6.27	
20	9.60		32.400		25.02	295.2	0.059	6.27	
30	9.60		32.412		25.02	295.2	0.089	6.28	
50	9.58	0.01	32.417	0.009	25.03	295.0	0.148	6.25	0.03
75	9.25	0.02	32.736	0.020	25.33	266.7	0.218	5.17	0.07

STATION 275-006 OBSERVED VALUES

DATE 1/12/61 HR 06 LAT 48-36N LONG 126-08W SDG 145 WEA 02
 SEC DI BA 19 CL 6 AMT 2 DRY WET RELHU VIS 7
 WVEL 3 DIR 16 SEA 2 DIR 16 SWL 1 DIR 18 WA --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0		32.368		6.33						
1	3		32.365		6.33						
1	6		32.366		6.33						
1	10	9.60	32.367	24.99	6.34						
1	15	9.60	32.367	24.99	6.33						
1	20	9.61	32.369	24.99	6.33						
1	25	9.60	32.371	24.99	6.33						
1	30	9.61	32.372	24.99	6.33						
1	40	9.61	32.379	24.99	6.33						
1	60	9.24	32.726	25.32	5.70						
1	80	8.84	33.118	25.69	4.60						
1	100	8.56	33.317	25.89	3.92						
1	125	8.49	33.361	25.94	3.76						

24

STATION 275-006 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0			32.368					6.33	
10	9.60		32.367		24.99	298.2		6.34	
20	9.61		32.369		24.99	298.4		6.33	
30	9.61		32.372		24.99	298.3		6.33	
50	9.46	0.02	32.522	0.017	25.13	285.2		6.10	0.02
75	8.94	0.00	33.027	0.007	25.61	240.3		4.88	0.03
100	8.56		33.317		25.89	213.7		3.92	

STATION 275-007 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.71		32.395		24.99	297.6	0.000	6.30	
10	9.70		32.391		24.99	298.0	0.030	6.30	
20	9.70		32.392		24.99	298.1	0.060	6.29	
30	9.71		32.392		24.99	298.4	0.090	6.28	
50	9.79	0.06	32.604	0.032	25.14	284.2	0.148	5.89	0.06
75	8.84	0.07	33.186	0.003	25.75	227.1	0.212	4.70	0.01
100	8.30		33.493		26.07	196.8	0.265	3.87	
150	7.84	0.00	33.748	0.014	26.34	172.1	0.357	3.07	0.06
200	7.74	0.03	33.685	0.037	26.30	176.3	0.444	3.28	0.15
250	7.59	---	33.618	---	26.27	179.9	0.533	3.52	---
300	7.16	---	33.693	---	26.39	169.1	0.621	3.22	---

M

STATION 275-008 OBSERVED VALUES

DATE 1/12/61 HR 11 LAT 48-32N LONG 126-16W SDG 677 WEA 02
 SECDI BA 18 CL 6 AMT 2 DRY 9.6 WET 7.8 RELHU 79 VIS
 WVEL 11 DIR 17 SEA 3 DIR 17 SWL 1 DIR 17 WA 40.18

CST DEPTH TEMP. SAL. SIGMA-T OXY. PHOS. SIL. NITR. CHL-A PROD-I PROD-S

2	0	9.57	32.375	25.00	6.34					
2	10	9.56	32.367	24.99	6.34					
2	20	9.56	32.368	24.99	6.34					
2	30	9.54	32.367	25.00	6.38					
2	39	9.57	32.372	24.99	6.34					
2	59	9.59	32.484	25.08	6.18					
2	78	9.65	32.918	25.41	5.36					
2	97	8.31	33.409	26.00	4.21					
2	121	8.10	33.651	26.22	3.45					
2	146	7.96	33.764	26.33	3.08					
1	154	7.99	33.828	26.38	2.97					
2	170	7.80	33.830	26.41	2.79					
1	226	7.08	33.927	26.58	2.60					
1	277	6.77	33.970	26.66	2.13					
1	382	6.14	34.021	26.78	1.75					

STATION 275-008 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.57		32.375		25.00	297.0	0.000	6.34	
10	9.56		32.367		24.99	297.6	0.030	6.34	
20	9.56		32.368		24.99	297.7	0.060	6.34	
30	9.54		32.367		25.00	297.6	0.090	6.38	
50	9.58	0.00	32.403	0.009	25.02	296.0	0.149	6.30	0.03
75	9.69	0.03	32.837	0.006	25.34	265.9	0.219	5.52	0.01
100	8.24	0.03	33.454	0.005	26.05	198.8	0.277	4.08	0.01
150	7.98	0.03	33.798	0.014	26.36	170.4	0.370	3.02	0.00
200	7.51	0.10	33.939	0.034	26.53	154.1	0.451	2.67	0.04
250	6.91	0.01	33.951	0.001	26.63	145.8	0.526	2.38	0.02
300	6.63	---	33.985	---	26.69	140.2	0.597	1.98	---

STATION 275-009 OBSERVED VALUES

DATE 1/12/61 HR 15 LAT 48-32N LONG 126-21W SDG 896 WEA 03
 SECD 1 BA 16 CL 8 AMT 5 DRY 9.4 WET 7.8 RELHU 78 VIS 7
 WVEL 16 DIR 17 SEA 3 DIR 17 SWL 1 DIR 17 WA 35.20

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	9.48	32.374	25.01	6.29						
2	10	9.49	32.370	25.01	6.30						
2	19	9.49	32.368	25.00	6.30						
2	29	9.48	32.365	25.00	6.30						
2	38	9.48	32.368	25.01	6.30						
2	57	9.48	32.427	25.05	6.18						
2	76	9.02	32.995	25.57	5.11						
2	97	8.54	33.401	25.96	4.12						
2	117	8.30	33.640	26.18	3.53						
1	122	8.24	33.642	26.19	3.48						
2	141	7.90	33.744	26.32	3.17						
2	164	7.56	33.828	26.44	2.85						
1	182	7.60	33.906	26.49	2.33						
1	308	6.39	33.982	26.72	2.07						
1	436	5.85	34.007	26.81	1.75						
1	505	5.33	34.071	26.92	1.14						

STATION 275-009 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.48		32.374		25.01	295.7	0.000	6.29	
10	9.49		32.370		25.01	296.3	0.030	6.30	
20	9.49	0.00	32.368	0.000	25.00	296.6	0.060	6.30	0.00
30	9.48	0.00	32.365	0.000	25.00	296.9	0.089	6.30	0.00
50	9.51	0.02	32.371	0.017	25.00	297.1	0.149	6.29	0.03
75	9.05	0.00	32.961	0.006	25.54	246.9	0.217	5.18	0.01
100	8.50	0.01	33.441	0.003	26.00	203.6	0.273	4.02	0.01
150	7.74	0.01	33.778	0.002	26.37	168.4	0.366	3.06	0.02
200	7.49	0.07	33.944	0.016	26.54	153.5	0.447	2.11	0.12
250	7.07	0.14	34.001	0.032	26.64	144.2	0.521	1.83	0.25
300	6.50	0.03	33.990	0.008	26.71	138.1	0.592	2.00	0.06
400	5.99	0.04	33.996	0.006	26.78	132.4	0.727	1.90	0.03
500	5.37	----	34.065	----	26.91	120.7	0.853	1.19	----

STATION 275-010 OBSERVED VALUES

DATE	1/12/61	HR	19	LAT	48-24N	LONG	126-29W	SDG	1335	WEA	02
SECD	1	BA	13	CL	6	AMT	8	DRY	WET	RELHU	VIS
WVEL	18	DIR	14	SEA	5	DIR	14	SWL	1	DIR	18
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	137	7.70									
1	205	7.00									
1	341	5.91									
1	541	4.73	34.133	27.04	0.74						
1	806	4.04	34.300	27.25	0.35						

STATION 275-010 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 275-010A OBSERVED VALUES

DATE	1/13/61	HR	00	LAT	48-24N	LONG	126-29W	SDG	RELHU	WEA	VIS
SECD	1	BA		CL		AMT	8	DRY	WET		
WVEL		DIR		SEA		DIR		SWL	1	DIR	
	DEPTH										
A	0									CHL-A	0.16
										PROD-I	0.47
										PROD-S	

STATION 275-011 OBSERVED VALUES

DATE 1/16/61 HR 14 LAT 46-12N LONG 129-39W SDG 2561 WEA 03
SECDI 15 BA 21 CL 6 AMT 8 DRY 9.2 WET 8.1 RELHU 87 VIS 6
WVEL 2 DIR 16 SEA 8 DIR 16 SWL 1 DIR 24 WA 11.13, 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	4	9.83	32.612	25.14	6.36	0.93	4	5.1	0.16		
	6								0.12		
P	4	9.83	32.607	25.14	6.36	0.91	4	3.8			
	20	9.83	32.610	25.14	6.35	0.95	5	5.6	0.23		
A	29	9.82	32.619	25.15	6.37	0.89	5	3.4			
	39	9.82	32.610	25.14	6.37	0.76	3	2.0			
A	41								0.07		
	58	9.84	32.616	25.14	6.34	0.82	4	3.4			
A	78	8.17	32.939	25.65	5.91	1.12	13	8.3			
	97	7.92	33.221	25.91	4.94	1.41	19	15.2			
A	122	7.80	33.590	26.22	3.70	1.84	28	19.5			
	146	7.50	33.782	26.41	3.24	2.08	30	19.7			
A	171	7.12	33.875	26.54	2.98	2.35	27	16.6			
	195	7.02	33.894	26.57	2.87	2.04	32	19.8			
A	291	6.04	33.987	26.77		2.23	51	42.9			
	485	5.10	33.811	26.74	3.05*	1.92*	41*	37.5*			
A	728	4.03	34.291	27.24	0.41	2.71	97	52.9			
	1043	3.30	34.434	27.43	0.41	3.20	128	60.7			
A	1328	2.66	34.497	27.54	0.57	2.83	124	53.6			
	1639	2.16	34.564	27.63	1.00	3.24	168	69.6			

STATION 275-011 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.83		32.612		25.14	283.4	0.000	6.36	
10	9.83		32.607		25.14	284.0	0.029	6.36	
20	9.83		32.600		25.14	284.0	0.057	6.35	
30	9.82	0.00	32.618	0.000	25.15	283.4	0.086	6.37	0.00
50	9.93	0.06	32.594	0.011	25.11	287.2	0.143	6.38	0.01
75	8.43	0.07	32.881	0.007	25.57	243.7	0.209	6.01	0.00
100	7.90	0.01	33.260	0.003	25.95	207.7	0.265	4.77	0.01
150	7.43	0.01	33.803	0.001	26.44	162.4	0.358	3.19	0.00
200	6.98	0.01	33.900	0.001	26.58	146.1	0.435	2.88	0.02
250	6.49	0.05	33.953	0.006	26.68	135.7	0.506	2.94	0.16
300	5.98	0.01	33.979	0.007	26.77	132.3	0.573	2.98	0.25
400	5.42	0.05	33.888	0.040	26.77	133.4	0.705	3.04	0.22
500	5.03	0.00	33.834	0.011	26.77	133.7	0.839	2.89	0.05
600	4.56	0.01	34.010	0.046	26.96	116.1	0.964	1.82	0.20
700	4.14	0.01	34.224	0.019	27.18	96.2	1.070	0.72	0.08
800	3.83	0.02	34.351	0.014	27.31	84.1	1.160	0.23	0.11
1000	3.38	0.01	34.433	0.009	27.42	74.5	1.319	0.29	0.07
1200	2.94	0.01	34.473	0.003	27.49	67.8	1.461	0.47	0.00
1500	2.36	---	34.534	---	27.59	58.4	1.650	0.77	---

STATION 275-012 OBSERVED VALUES									
DATE	1/18/61	HR	03	LAT	45-03N	LONG	127-07W	SDG	2834
SECD	1	BA	24	CL	6	AMT	7	WET	8.8
WVEL	23	DIR	SEA	2	DIR	SWL	6	DIR	30
		DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.
CAST									
3	0	9.85	32.569	25.10	6.28	0.98	11	7.1	
2	10	9.86	32.567	25.10	6.28	0.96	8	5.9	
2	20	9.84	32.565	25.10	6.28	0.93	9	6.2	
2	30	9.83	32.565	25.10	6.28	1.08	12	6.6	
2	39	9.69	32.806	25.31	5.76	1.22	25	17.3	
2	59	8.53	33.728	26.26	3.94	1.96	24	31.9	
2	78	8.36	33.794	26.29	3.75	1.79	39	30.5	
2	98	8.14	33.851	26.37	3.53	2.56	43	39.3	
2	123	7.90	33.882	26.43	3.38	2.58	50	28.1	
1	141	7.68	33.924	26.50	3.27	2.62	49	31.1	
2	148	7.70	33.910	26.48	3.28	2.74	48	31.3	
2	172	7.44	33.950	26.55	2.72	2.57	44	31.4	
1	214	7.26	33.986	26.61	2.22	2.33	46	34.8	
1	361	6.60	34.034	26.73	1.74	2.22	76	36.3	
1	548	5.49	34.129	26.95	0.92	3.29	100	64.3	
1	813	4.36	34.297	27.21	0.40				
1	1226	3.12	34.477	27.48	0.55		132	42.9	
1	1713	2.32	34.552	27.61	1.05	2.57	107	24.6	

STATION 275-012 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.85		32.569		25.10	286.9	0.000	6.28	
10	9.86		32.567		25.10	287.4	0.029	6.28	
20	9.84		32.565		25.10	287.4	0.058	6.28	
30	9.83		32.565		25.10	287.5	0.087	6.28	
50	9.06	0.09	33.334	0.058	25.83	219.0	0.137	4.71	0.11
75	8.36	0.02	33.810	0.017	26.31	173.7	0.186	3.73	0.03
100	8.12	0.00	33.854	0.001	26.38	167.4	0.229	3.52	0.00
150	7.63	0.01	33.921	0.002	26.50	156.4	0.310	3.04	0.02
M									
200	7.31	0.01	33.976	0.000	26.59	148.6	0.386	2.37	0.00
250	7.09	0.02	34.004	0.005	26.64	144.3	0.459	2.03	0.06
M									
300	6.80	0.06	34.025	0.009	26.70	139.6	0.530	1.87	0.06
400	6.37	0.02	34.051	0.001	26.78	133.2	0.667	1.56	0.02
500	5.78	0.02	34.102	0.001	26.89	123.1	0.795	1.12	0.02
600	5.24	0.01	34.162	0.002	27.01	113.0	0.913	0.77	0.01
700	4.79	0.01	34.225	0.003	27.11	103.9	1.022	0.55	0.01
800	4.41	0.00	34.289	0.001	27.20	95.5	1.121	0.41	0.00
1000	3.73	0.00	34.391	0.000	27.35	81.6	1.298	0.38	0.04
1200	3.18	0.00	34.469	0.000	27.47	70.9	1.451	0.52	0.01
1500	2.58	---	34.537	---	27.58	60.7	1.648	0.79	---

STATION 275-012D OBSERVED VALUES

DATE 1/18/61 HR 03 LAT 45-03N LONG 127-07W SDG 2834 WEA 02
 SECDI 23 BA 24 CL 6 AMT 7 DRY 10.1 WET 8.8 RELHU 84 VIS 7
 WVEL DIR SEA 2 DIR SWL 6 DIR 30 WA --

DEPTH	CHL-A	PROD-I	PROD-S
0	0.42	0.58	
9	0.12	0.54	
31	0.23	0.46	
62	0.09	0.02	

STATION 275-013 OBSERVED VALUES												
DATE	1/18/61	HR	16	LAT	44-23N	LONG	125-54W	SDG	2926	WEA	03	
SECDI	BA	22	CL	0	AMT	2	DRY	10.3	WET	9.6	RELHU	80 VIS 8
WVEL	9	DIR	09	SEA	2	DIR	09	SWL	3	DIR	02	WA 10.07.05
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S	
P	4	9.99	32.492	25.02	6.34				0.32	0.32	1.76	
	10	9.98	32.495	25.02	6.40							
	20	10.00	32.497	25.02	6.40							
A	4	9.98	32.501	25.03	6.35				0.07	0.41		
	34											
A	4	9.98	32.500	25.03	6.35				0.23	0.33		
	40											
	50											
A	4	9.98	32.501	25.03	6.35				0.12	0.12		
	60											
	66											
	79	8.72	33.055	25.66	5.29							
	99	8.42	33.440	26.01	4.31							
	123	7.76	33.668	26.28	3.63							
	148	7.35	33.861	26.49	3.21							
	172	7.29	33.916	26.55	2.69							
	190	7.10	33.976	26.62								
	288	6.11	34.021	26.79								
	486	5.17	34.142	27.00								
	734	4.26	34.291	27.22	0.40							
	1036	3.49	34.438	27.41	0.47							
	1585	2.42	34.548	27.60	0.92							
	2184	1.83	34.633	27.71	1.77							

STATION 275-013 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.99		32.492		25.02	294.8	0.000	6.34	
10	9.98		32.495		25.02	294.6	0.030	6.40	
20	10.00		32.497		25.02	295.0	0.059	6.40	
30	9.98		32.501		25.03	294.6	0.089	6.35	
50	10.07	0.06	32.463	0.025	24.98	299.1	0.148	6.42	0.05
75	9.00	0.06	32.924	0.020	25.52	248.9	0.217	5.55	0.03
100	8.39	0.00	33.452	0.001	26.02	201.2	0.273	4.27	0.00
150	7.34	0.01	33.867	0.002	26.50	156.3	0.362	3.17	0.00
M									
200	7.06	0.05	33.973	0.005	26.62	145.4	0.438		
250	6.56	0.07	34.009	0.005	26.72	136.8	0.508		
300	6.03	0.01	34.028	0.000	26.80	129.3	0.575		
400	5.48	0.05	34.087	0.002	26.92	119.3	0.699		
M									
500	5.11	0.00	34.151	0.000	27.01	111.2	0.814		
600	4.72	0.00	34.212	0.001	27.10	102.9	0.922		
700	4.37	0.00	34.271	0.000	27.19	95.4	1.021		
800	4.07	0.01	34.327	0.001	27.27	88.7	1.113	0.37	0.02
M									
1000	3.57	0.00	34.423	0.000	27.39	77.4	1.279	0.43	0.01
1200	3.12	0.00	34.483	0.006	27.48	69.2	1.425	0.57	0.00
1500	2.56	0.00	34.539	0.004	27.58	60.3	1.620	0.83	0.00
2000	1.95	---	34.611	---	27.69	50.1	1.896	1.47	---

STATION 275-014 OBSERVED VALUES													
DATE	1/18/61	HR	23	LAT	44-12N	LONG	125-25W	SDG	2926	WEA	01		
SECDI	23	BA	21	CL	1	AMT	2	DRY	12.1	WET	9.8	RELHU	75
WVEL	5	DIR	15	SEA	2	DIR	15	SWL	1	DIR	10	WA	15, 22, 21, 10
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	4	9	10.92	32.622	24.96	6.27	0.87	5	2.7	0.41	3.28		
A	4	10	10.91	32.626	24.97	6.28	0.83	4	3.5		0.28		
	4	20	10.86	32.625	24.97	6.28	0.86	6	2.6				
A	4	30	10.86	32.623	24.97	6.27	0.90	6	3.4				
	4	31											
	4	40	10.86	32.624	24.97	6.27	0.81	5	2.6	0.36	0.32		
	4	59	10.89	32.627	24.97	6.26	0.75	12	6.7				
A	4	62											
	4	79	10.62	32.698	25.07	6.08	0.93	6	3.4	0.52	2.24		
	4	98	8.94	33.166	25.71	5.18	1.64	20	12.6				
	4	122	8.04	33.506	26.12	4.46	1.89	28	9.0				
	4	147	7.72	33.672	26.29	4.06	2.08	32	23.4				
	4	172	7.36	33.832	26.47	3.94	2.09	37	27.0				
	1	190	7.54	33.914	26.51	2.92	2.23	40	44.5				
	1	284	6.14	33.942	26.72	3.00	2.46	59	45.4				
	1	476	4.92	34.067	26.97	0.98	3.12	93	57.1				
	2	702	4.27	34.266	27.20	0.35	3.40	114	65.0				
	2	981	3.68	34.424	27.38	0.35	3.57	135	70.1				
	3	1562	2.49	34.544	27.59	0.86	3.51	173	64.8				
	3	2152	1.83	34.620	27.70	1.72	3.26	191	58.0				

STATION 275--014 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.92		32.622		24.96	300.4	0.000	6.27	
10	10.91		32.626		24.97	300.1	0.031	6.28	
20	10.86		32.625		24.97	299.5	0.061	6.28	
30	10.86		32.623		24.97	299.9	0.090	6.27	
50	10.89	0.01	32.622	0.003	24.97	300.9	0.151	6.28	0.01
75	10.75	0.03	32.664	0.010	25.02	295.9	0.225	6.15	0.02
100	8.83	0.01	33.203	0.001	25.76	226.1	0.290	5.10	0.00
150	7.66	0.01	33.693	0.001	26.32	173.7	0.390	4.08	0.03
200	7.18	0.12	33.901	0.010	26.58	149.9	0.471	3.36	0.27
250	6.51	0.05	33.924	0.003	26.70	139.0	0.544	3.20	0.10
300	5.98	0.02	33.940	0.001	26.75	134.5	0.612	2.86	0.05
400	5.23	0.06	34.000	0.002	26.89	122.0	0.740	1.87	0.17
500	4.83	0.01	34.088	0.002	26.99	112.4	0.857	0.85	0.02
600	4.50	0.03	34.177	0.005	27.10	103.0	0.965	0.48	0.05
700	4.27	0.00	34.264	0.000	27.19	94.8	1.064	0.35	0.00
800	4.05	0.01	34.331	0.001	27.27	88.2	1.156	0.29	0.03
1000	3.64	0.00	34.431	0.001	27.39	77.6	1.321	0.36	0.00
1200	3.20	0.02	34.488	0.009	27.48	69.7	1.469	0.48	0.01
1500	2.60	0.01	34.539	0.004	27.57	60.9	1.664	0.78	0.01
2000	1.95	---	34.605	---	27.68	50.6	1.943	1.47	---

STATION 275-015 OBSERVED VALUES													
DATE	1/19/61	HR	05	LAT	44-07N	LONG	124-43W	SDG	109	WEA	00		
SECDI	BA	20	CL	AMT	DRY	11.4	WET	9.5	RELHU	79	VIS	8	
WVEL	7	DIR	16	SEA	2	DIR	16	SWL	1	DIR	WA	05	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	10.61	32.649	25.04	6.33				0.41	0.69			
	3	10.60	32.656	25.04	6.33								
	6	10.60	32.654	25.04	6.33								
A	9												
	10	10.60	32.661	25.05	6.33				0.74	0.72			
	15	10.60	32.655	25.04	6.33								
	20	10.60	32.657	25.04	6.33								
	25	10.59	32.658	25.05	6.33								
	30	10.58	32.655	25.05	6.32								
A	31												
	40	10.54	32.655	25.05	6.32				0.47	0.59			
	60	10.50	32.695	25.09	6.15								
A	62												
	75	10.43	33.168	25.47	5.14				0.29	0.63			
	90	9.99	33.340	25.68	4.72								

STATION 275-015 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.61		32.649		25.04	293.2	0.000	6.33	
10	10.60		32.661		25.05	292.4	0.030	6.33	
20	10.60		32.657		25.04	292.9	0.059	6.33	
30	10.58		32.655		25.05	292.9	0.088	6.32	
50	10.52	0.00	32.629	0.026	25.04	294.2	0.147	6.33	0.05
75	10.43	---	33.168	---	25.47	253.4	0.215	5.14	---

STATION 275-016 OBSERVED VALUES

DATE 1/18/61 HR 08 LAT 44-03N LONG 124-25W SDG 121 WEA 00
 SECDI BA 21 CL AMT DRY 11.1 WET 8.6 RELHU 72 VIS 7
 WVEL 11 DIR 12 SEA 1 DIR 12 SWL 1 DIR WA 07

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.64	32.686	25.06	6.28			0.23	0.81	
	1	3	10.63	32.692	25.07	6.28					
	1	6	10.62	32.692	25.07	6.28					
A	1	9							0.37	0.65	
	1	10	10.61	32.695	25.07	6.28					
	1	15	10.62	32.695	25.07	6.28					
	1	20	10.62	32.693	25.07	6.28					
	1	25	10.62	32.693	25.07	6.28					
	1	30	10.62	32.694	25.07	6.27					
A	1	31							0.41	0.64	
	1	40	10.60	32.694	25.07	6.27					
	1	60	10.61	32.761	25.12	6.10					
A	1	62							0.27	0.26	
	1	80	10.42	33.066	25.39	5.55					
	1	100	10.26	33.164	25.50	5.29					

STATION 275-016 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.64		32.686		25.06	291.0	0.000	6.28	
10	10.61		32.695		25.07	290.0	0.030	6.28	
20	10.62		32.693		25.07	290.5	0.059	6.28	
30	10.62		32.694		25.07	290.7	0.088	6.27	
50	10.61	0.01	32.707	0.006	25.08	290.0	0.146	6.22	0.01
75	10.48	0.01	32.988	0.014	25.32	267.4	0.215	5.69	0.02
100	10.26	---	33.164	---	25.50	251.4	0.280	5.29	---

STATION 275-017 OBSERVED VALUES

DATE 1/19/61 HR 12 LAT 44-00N LONG 124-11W SDG 37 WEA 02
 SECDI BA 20 CL 1 AMT 1 DRY 10.7 WET 8.2 RELHU 72 VIS 7
 WVEL 10 DIR 08 SEA 1 DIR 08 SWL 1 DIR 08 WA 08

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.42	32.199	24.72	6.45						
1	3	10.44	32.210	24.72	6.45						
1	6	10.42	32.222	24.74	6.45						
1	10	10.54	32.411	24.86	6.40						
1	15	10.60	32.587	24.99	6.33						
1	20	10.62	32.591	24.99	6.32						
1	25	10.64	32.622	25.01	6.30						
1	30	10.68	32.631	25.01	6.27						
1	33	10.64	32.644	25.03	6.24						

STATION 275-017 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.42		32.199		24.72	323.4	0.000	6.45	
10	10.54		32.411		24.86	309.9	0.032	6.40	
20	10.62		32.591		24.99	298.1	0.063	6.32	
30	10.68		32.631		25.01	296.3	0.092	6.27	

STATION 275-017D OBSERVED VALUES

DATE 1/19/61 HR 14 LAT 44-00N LONG 124-11W SDG 00 WEA 00
 SECDI 12 BA 21 CL 1 AMT 1 DRY 10.7 WET 8.2 RELHU 72 VIS 7
 WVEL 2 DIR 09 SEA 1 DIR 09 SWL 1 DIR 09 WA 09

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.42		32.199		24.72	323.4	0.000	6.45	
10	10.54		32.411		24.86	309.9	0.032	6.40	
20	10.62		32.591		24.99	298.1	0.063	6.32	
30	10.68		32.631		25.01	296.3	0.092	6.27	

CHL-A PROD-I PROD-S

8.67 1.68 5.82
 0.45 1.02
 0.26 0.98

STATION 275-018 OBSERVED VALUES

DATE 1/19/61 HR 16 LAT 44-18N LONG 124-10W SDG 46 WEA 02
 SECDI BA 21 CL 0 AMT 1 DRY 11.8 WET 7.2 RELHU 62 VIS 7
 WVEL 2 DIR 09 SEA 1 DIR 09 SWL 1 DIR 03 WA 03

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	10.40	32.112	24.65	6.45				0.56	2.09	
	3	10.39	32.122	24.66	6.46						
	6	10.42	32.136	24.67	6.47						
A	9										
	10	10.42	32.245	24.75	6.47				0.39	1.58	
	15	10.47	32.481	24.93	6.34						
	20	10.58	32.603	25.01	6.29						
	25	10.57	32.613	25.02	6.27						
	30	10.58	32.613	25.01	6.26						
A	31										
	35	10.58	32.645	25.04	6.25				0.44	0.46	
P	1	10.62	32.648	25.03	6.25				0.15	0.90	

41

STATION 275-018 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
10	10.40		32.112		24.65	329.5	0.000	6.45	
20	10.42		32.245		24.75	320.2	0.033	6.47	
30	10.58		32.603		25.01	296.5	0.064	6.29	
			32.613		25.01	296.0	0.093	6.26	

STATION 275-019 OBSERVED VALUES

DATE 1/19/61 HR 18 LAT 44-34N LONG 124-09W SDG 48 WEA 02
 SECDI 4 BA 20 CL 1 AMT 1 DRY 11.6 WET 8.6 RELHU 67 VIS 7
 WVEL 5 DIR 09 SEA 1 DIR 09 SWL 1 DIR 00 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.11	31.446	24.19	6.64	1.33	19	8.8			
1	3	10.10	31.432	24.18	6.64	1.18	19	9.4			
1	6	10.18	31.668	24.35	6.58	1.20	17	8.3			
1	10	10.48	32.328	24.81	6.44	1.14	13	5.7			
1	15	10.46	32.493	24.94	6.38	1.02	10	6.3			
1	20	10.48	32.521	24.96	6.33	1.09	12	6.2			
1	25	10.49	32.534	24.97	6.32	1.04	9	5.9			
1	30	10.49	32.541	24.97	6.27	1.12	9	5.4			
1	40	10.49	32.542	24.97	6.27	1.11	11	7.1			
1	45	10.48	32.543	24.98	6.27	1.20	11	7.1			

STATION 275-019 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.11		31.446		24.19	374.2	-0.000	6.64	
10	10.48		32.328		24.81	315.0	0.035	6.44	
20	10.48		32.521		24.96	300.9	0.066	6.33	
30	10.49		32.541		24.97	299.8	0.096	6.27	

STATION 275-020 OBSERVED VALUES

DATE 1/19/61 HR 20 LAT 44-38N LONG 124-18W SDG 81 WEA 02
 SECDI 14 BA 23 CL 1 AMT 1 DRY 12.3 WET 9.2 RELHU 66 VIS 7
 WVEL 4 DIR 90 SEA 1 DIR 90 SWL 1 DIR 27 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	1	10.48	32.429	24.89	6.37	1.10	11	12.1	0.35	1.43	5.68
A	1	10.50	32.434	24.89	6.37	1.06	11	8.7	0.26	1.53	2.66
	5										
	6	10.48	32.445	24.90	6.38						
	10	10.54	32.508	24.94	6.37						
	15	10.62	32.558	24.96	6.34						
A	18					0.96	8	6.8	0.38	1.08	0.48
	20	10.71	32.597	24.98	6.28						
A	36								0.30		
	25	10.80	32.641	25.00	6.25						
	30	10.80	32.655	25.01	6.24						
	36					0.87	7	6.4	0.30	1.17	0.00
A	40	10.82	32.663	25.01	6.24						
	60	10.71	32.657	25.03	6.20						
	80	10.58	32.876	25.22	5.69						

43

STATION 275-020 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.48		32.429		24.89	307.4	0.000	6.37	
10	10.54		32.508		24.94	302.7	0.031	6.37	
20	10.71		32.597		24.98	299.1	0.061	6.28	
30	10.80		32.655		25.01	296.5	0.091	6.24	
50	10.78	0.01	32.648	0.011	25.01	297.1	0.150	6.25	0.02
75	10.61	---	32.800	---	25.15	283.6	0.223	5.86	---

STATION 275-021 OBSERVED VALUES

DATE 1/20/61 HR 01 LAT 44-46N LONG 124-40W SDG 238 WEA 02
 SECDI 23 BA 21 CL 1 AMT 1 DRY 11.9 WET 11.0 RELHU 90 VIS 7
 WVEL DIR SEA 1 DIR SWL 1 DIR WA 00, 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	10.86	32.649	24.99	6.27				0.22	0.81	
	3	10.83	32.651	25.00	6.27						
	6	10.74	32.648	25.01	6.28						
A	9								0.29	0.86	
	10	10.70	32.646	25.02	6.28						
	15	10.69	32.646	25.02	6.28						
	20	10.70	32.646	25.02	6.27						
	25	10.68	32.646	25.02	6.27						
	30	10.68	32.647	25.02	6.27						
A	31								0.28	0.88	
	40	10.65	32.646	25.03	6.25						
	60	10.66	32.648	25.03	6.25						
A	62								0.14	0.96	
	80	10.64	32.891	25.22	5.76						
	100	9.48	33.400	25.81	4.40						
	125	8.90	33.678	26.12	3.49						
	150	8.70	33.730	26.19	3.34						
	175	8.08	33.871	26.40	2.80						
	200	7.80	33.910	26.47	2.69						

4

STATION 275-021 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.86		32.649		24.99	297.4	0.000	6.27	
10	10.70		32.646		25.02	295.1	0.030	6.28	
20	10.70		32.646		25.02	295.3	0.060	6.27	
30	10.68		32.647		25.02	295.1	0.089	6.27	
50	10.65	0.01	32.632	0.010	25.02	296.2	0.148	6.28	0.02
75	10.70	0.03	32.806	0.001	25.14	284.6	0.221	5.95	0.01
100	9.48		33.390		25.81	221.5	0.284	4.40	
150	8.70		33.720		26.19	186.0	0.386	3.34	
200	7.80		33.900		26.47	160.4	0.473	2.69	

STATION 275-022 OBSERVED VALUES

DATE 1/20/61 HR 10 LAT 45-02N LONG 125-20W SDG 2012 WEA 02
 SECDI 2 BA 21 CL 1 AMT 1 DRY 10.7 WET 8.9 RELHU 80 VIS 7
 WVEL 2 DIR 10 SEA 1 DIR 10 SWL 1 DIR 23 WA --, 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	3	10.00	32.477	25.01	6.36				0.11	0.25	
A	9								0.10	0.30	
	3	10.02	32.480	25.00	6.37						
	20	10.01	32.480	25.01	6.36						
A	3	10.02	32.475	25.00	6.37				0.21	0.31	
	31										
	39	10.01	32.477	25.00	6.37						
	58	9.92	32.534	25.06	6.25						
A	62								0.11	0.12	
	77	9.09	32.906	25.49	5.60						
	97	8.44	33.207	25.82	4.92						
	122	8.21	33.571	26.14	3.86						
	145	7.74	33.744	26.35	3.71						
	170	7.44	33.840	26.47	3.38						
	196	6.92	33.929	26.61	3.11						
	294	6.08	34.022	26.79	1.81						
2	489	5.07	34.133	27.00	0.74						
2	734	4.38	34.308	27.22	0.38						
2	1029	3.55	34.434	27.40	0.38						
2	1570	2.49	34.544	27.59	0.85						
2	1864	2.10	34.592	27.66	1.31						

STATION 275-022 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	10.00		32.477		25.01	296.1	0.000	6.36	
10	10.02		32.470		25.00	296.4	0.030	6.37	
20	10.01		32.470		25.01	296.4	0.060	6.36	
30	10.02	0.00	32.475	0.000	25.00	297.2	0.089	6.37	0.00
50	10.01	0.03	32.487	0.010	25.01	296.5	0.149	6.34	0.02
75	9.19	0.01	32.861	0.006	25.44	256.4	0.218	5.68	0.01
100	8.40	0.02	33.256	0.003	25.87	215.9	0.277	4.77	0.02
150	7.68	0.01	33.767	0.002	26.37	168.4	0.373	3.65	0.01
200	7.08	0.01	33.910	0.012	26.57	150.3	0.453	2.96	0.02
250	6.52	0.01	33.990	0.015	26.71	137.7	0.525	2.32	0.02
300	6.04	0.00	34.026	0.001	26.80	129.5	0.592	1.76	0.01
400	5.45	0.02	34.087	0.005	26.92	118.9	0.716	1.06	0.05
500	5.03	0.00	34.141	0.001	27.01	110.9	0.831	0.71	0.01
600	4.72	0.03	34.214	0.004	27.11	102.8	0.938	0.49	0.03
700	4.46	0.01	34.284	0.002	27.19	95.5	1.037	0.39	0.02
800	4.19	0.01	34.342	0.001	27.27	88.9	1.129	0.35	0.01
1000	3.63	0.00	34.425	0.001	27.39	77.9	1.296	0.37	0.00
1200	3.16	0.01	34.479	0.005	27.48	69.9	1.444	0.47	0.00
1500	2.60	0.00	34.535	0.002	27.57	61.1	1.640	0.76	0.00

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STATION 275-023 OBSERVED VALUES

DATE	1/20/61	HR	16	LAT	45-10N	LONG	124-56W	SDG	823	WEA	02			
SECD1	BA	18	CL	AMT	DRY	12.8	WET	9.4	RELHU	64	VIS	8		
WVEL	6	DIR	06	SEA	1	DIR	06	SWL	1	DIR	22	WA	22	--
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	2	0	10.59	32.634	25.03	6.29			0.36	0.63	3.24			
A	2	10	10.59	32.635	25.03	6.29			0.21	0.74				
	2	20	10.58	32.636	25.03	6.29								
A	2	29	10.58	32.636	25.03	6.29								
	2	31												
	2	39	10.58	32.643	25.04	6.29			0.43	0.65				
	2	58	10.60			6.25								
A	2	62												
	2	77	10.48			6.00			0.18	0.57				
	2	97	9.38	33.275	25.73	4.77								
	2	121	8.53	33.597	26.11	3.77								
	2	145	8.15	33.767	26.31	3.28								
	2	170	8.09			3.04								
1	184	7.87	33.898	26.45	2.89									
	1	277	6.52	34.007	26.72	2.07								
1	463	5.44	34.104	26.94	0.98									
1	705	4.37	34.290	27.20	0.37									

STATION 275-023 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.59		32.634		25.03	294.0	0.000	6.29	
10	10.59		32.635		25.03	294.1	0.030	6.29	
20	10.58		32.636		25.03	294.1	0.059	6.29	
30	10.58	0.00	32.636	0.000	25.03	294.3	0.089	6.29	0.00
50	10.60	0.01	32.716	0.021	25.09	289.1	0.147	6.28	0.01
75	10.52	0.01	32.964	0.031	25.30	269.9	0.217	6.05	0.01
100	9.25	0.00	33.318	0.003	25.78	223.9	0.279	4.62	0.00
150	8.14	0.02	33.790	0.002	26.32	173.3	0.378	3.22	0.01
200	7.72	0.09	33.928	0.006	26.49	157.9	0.461	2.75	0.01
250	6.98	0.09	33.992	0.008	26.65	143.7	0.536	2.30	0.00
300	6.32	0.03	34.022	0.004	26.76	133.4	0.605	1.90	0.00
400	5.67	0.07	34.078	0.008	26.89	122.3	0.733	1.28	0.01
500	5.25	---	34.128	---	26.98	114.6	0.852	0.83	---
600	4.79	---	34.201	---	27.09	104.6	0.961	0.52	---
700	4.39	---	34.285	---	27.20	94.6	1.061	0.37	---

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STATION 275-024 OBSERVED VALUES

DATE		1/20/61		HR 22		LAT 45-21N		LONG 124-29W		SDG 549		WEA 02	
SECD1	23	BA	16	CL	1	AMT 0	DIR 09	SWL 1	DIR 22	WET 10.0	RELHU 53	VIS 8	
WVEL	2	DIR 09	SEA	1	DIR 09	SIGMA-T	SAL	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I
CAST	DEPTH	TEMP.											
P	0	10.59											
	3	10.58											
	6	10.56											
A	9												
	10	10.54											
	15	10.54											
	20	10.54											
	24	10.54											
	29	10.53											
	31												
	39	10.52											
A													
	59	10.51											
	62												
A	78	10.32											
	97	9.71											
	122	8.68											
	172	7.76											
	195	7.63											
	293	6.52											
1	390	5.68											

STATION 275-024 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.59		32.608		25.01	295.9	0.000	6.28	
10	10.54		32.605		25.01	295.5	0.030	6.27	
20	10.54		32.600		25.02	295.3	0.060	6.27	
30	10.53	0.00	32.612	0.000	25.02	295.2	0.089	6.27	0.00
50	10.53	0.01	32.596	0.009	25.01	296.8	0.148	6.26	0.00
75	10.37	0.01	32.796	0.002	25.19	279.9	0.220	6.31	0.03
100	9.58	0.01	33.245	0.000	25.67	234.6	0.285	4.66	0.02
150	8.05	0.01	33.791	0.002	26.34	171.9	0.386	3.11	0.01
200	7.58	0.01	33.909	0.001	26.50	157.3	0.469	2.59	0.00
250	7.05	0.05	33.963	0.004	26.62	146.7	0.545	2.24	0.02
300	6.45	---	34.018	---	26.74	135.4	0.615	1.84	---

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STATION 275-025 OBSERVED VALUES													
DATE	1/21/61	HR	01	LAT	45-26N	LONG	124-12W	SDG	137	WEA	02		
SECDI	21	BA	16	CL	0	DRY	13.6	WET	8.4	RELHU	50	VIS	8
WVEL	6	DIR	09	SEA	1	DIR	09	SWL	1	DIR	23	WA	05
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	10.70	32.641	25.01	6.29				0.11	0.57			
	3	10.70	32.651	25.02	6.29								
	6	10.72	32.647	25.02	6.29								
A	9												
	10	10.70	32.648	25.02	6.28				0.27	0.43			
	15	10.69	32.662	25.03	6.28								
	20	10.67	32.674	25.05	6.28								
	24	10.67	32.641	25.02	6.28								
A	28	10.66	32.652	25.03	6.29				0.24	0.60			
	29	10.70	32.676	25.04	6.24								
	39												
A	54	10.76	32.682	25.04	6.23				0.16	0.45			
	59	10.76	32.683	25.04	6.23								
	78	10.76	32.686	25.41	5.29								
	97	9.98											
	117	9.26	33.413	25.86	4.17								

STATION 275-025 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	10.70		32.641		25.01	295.3	0.000	6.29					
10	10.70		32.648		25.02	295.0	0.030	6.28					
20	10.67		32.674		25.05	292.8	0.059	6.28					
30	10.66	0.00	32.655	0.000	25.03	294.3	0.089	6.29	0.00				
50	10.74	0.00	32.683	0.002	25.04	293.8	0.148	6.23	0.00				
75	10.79	0.02	32.673	0.007	25.02	295.9	0.221	6.26	0.02				
100	9.87	---	33.043	---	25.47	254.0	0.290	5.13	---				

[illegible]

DATE	1/21/61	HR	02	LAT	45-28N	LONG	124-08W	SDG	WEA
SECD	1	BA	CL	AMT	DRY	SWL	WET	RELHU	VIS
WVEL		DIR	SEA	DIR			DIR	WA	
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I									
PROD-S									
1	0		32.286						
1	10		32.387						
1	20		32.560						
1	40		32.619						

STATION 275-25A INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E (T)	SAL.	E (S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E (O)
0			32.286						
10			32.387						
20			32.560						
30			32.637	-----					

STATION 275-026 OBSERVED VALUES

DATE 1/21/61 HR 04 LAT 45-32N LONG 124-01W SDG 40 WEA 02
 SECDI BA 15 CL AMT 0 DRY 13.8 WET 8.4 RELHU 50 VIS 8
 WVEL 13 DIR 14 SEA 1 DIR 14 SWL 1 DIR 23 WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	10.26	31.999	24.59	6.51				0.41	0.97	
A	3	10.26	32.011	24.60	6.48				0.72	1.02	
	4										
	6	10.28	32.016	24.60	6.50						
A	10	10.29	32.032	24.61	6.50						
	13										
	15	10.32	32.076	24.64	6.46				0.40	1.29	
	20	10.37	32.158	24.70	6.44						
A	1	10.36	32.167	24.70	6.44						
	27										
	29	10.36	32.185	24.72	6.44				0.30	1.23	

STATION 275-026 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.26		31.999		24.59	335.6	0.000	6.51	
10	10.29		32.032		24.61	333.9	0.034	6.50	
20	10.37		32.158		24.70	326.0	0.067	6.44	

STATION 275-027 OBSERVED VALUES													
DATE	1/21/61	HR	06	LAT	45-37N	LONG	124-09W	SDG	115	WEA	02		
SECD	1	BA	15	CL	0	DRY	11.7	WET	8.1	RELHU	60		
WVEL	6	DIR	10	SEA	1	DIR	10	SWL	1	DIR	23	WA	10
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	9	10.28	31.983	24.57	6.46			0.37	0.93			
	1	3	10.27	32.025	24.61	6.46							
	1	6	10.30	32.108	24.67	6.46							
A		9							0.28	0.88			
	1	10	10.42	32.245	24.75	6.42							
	1	15	10.70	32.640	25.01	6.29							
	1	20	10.70	32.657	25.03	6.28							
A		24	10.72	32.669	25.03	6.24			0.24	0.43			
	1	28	10.73	32.679	25.04	6.23							
	1	38	10.72	32.690	25.05	6.24							
A		57							0.16	0.47			
	1	58	10.74	32.686	25.04	6.23							
	1	76	10.71	32.698	25.06	6.20							
	1	96	10.21	32.978	25.36	5.35							

54

STATION 275-027 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	10.28		31.983		24.57	337.1	0.000	6.46					
10	10.42		32.245		24.75	320.2	0.033	6.42					
20	10.70		32.657		25.03	294.5	0.064	6.28					
30	10.73	0.00	32.681	0.000	25.04	293.5	0.094	6.23	0.00				
50	10.73	0.00	32.689	0.002	25.05	293.3	0.152	6.24	0.00				
75	10.72	0.00	32.694	0.002	25.05	293.2	0.225	6.21	0.01				

STATION 275-028 OBSERVED VALUES													
DATE	1/21/61	HR	11	LAT	45-48N	LONG	124-38W	SDG	208	WEA			
SECDI	BA	15	CL	AMT	DRY	WET	RELHU						
WVEL	3	DIR	10	SEA	DIR	SWL	DIR	WA	03	--			
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	3	10.54	32.622	25.03	6.27				0.31	0.41			
	6	10.56	32.623	25.02	6.28								
A	9								0.05	0.51			
	10	10.55	32.620	25.02	6.28								
	15	10.56	32.303	24.78	6.29								
	20	10.56	32.626	25.03	6.29								
	24	10.56	32.624	25.03	6.29								
	29	10.56	32.626	25.03	6.29								
A	31								0.25	0.66			
	39	10.52	32.621	25.03	6.29								
	59	10.56	32.618	25.02	6.29								
A	62								0.26	0.61			
	78	10.57	32.622	25.02	6.29								
	98	10.58	32.751	25.13	6.14								
1	98	10.31	32.806	25.12	6.14								
1	123	9.62	33.202	25.63	6.29								

STATION 275-028 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.54		32.622		25.03	294.1	0.000	6.27	
10	10.55		32.610		25.02	294.6	0.030	6.28	
20	10.56		32.626		25.03	294.5	0.059	6.29	
30	10.56	0.00	32.626	0.000	25.03	294.7	0.089	6.29	0.00
50	10.53	0.01	32.618	0.000	25.03	295.2	0.148	6.29	0.00
75	10.57	0.00	32.617	0.002	25.02	296.4	0.222	6.29	0.00
100	10.40	---	32.803	---	25.19	280.4	0.294	6.14	---

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STATION 275-029 OBSERVED VALUES

DATE 1/21/61 HR 17 LAT 45-40N LONG 125-01W SDG 1573 WEA 02
SECDI 23 BA 13 CL 1 AMT 2 DRY 12.2 WET 10.4 RELHU 82 VIS 8
WVEL 2 DIR 16 SEA 1 DIR 16 SWL 1 DIR 23 WA 20, 17

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	3	9	10.62	32.630	25.02	6.27				0.28	0.82	3.28
	3	10	10.51	32.634	25.04	6.27					0.97	
A	3	20	10.55	32.636	25.04	6.27					0.74	
	3	29	10.55	32.640	25.04	6.27						
	3	31										
A	3	38	10.55	32.640	25.04	6.27				0.40	0.83	
	3	57	10.56	32.642	25.04	6.27						
	3	62	10.36	32.809	25.20	5.77				0.32		
A	3	76	9.45	33.198	25.66	4.89						
	3	122	8.78	33.524	26.02	4.01						
	3	145	8.28	33.746	26.27	3.36						
A	3	168	7.96	33.845	26.39	3.05						
	2	189	7.80	33.880	26.45	2.83						
A	2	284	7.14	33.966	26.61	2.42						
	2	475	5.38	34.114	26.95	0.93						
	2	715	4.48	34.281	27.19	0.41						
A	2	999	3.56	34.420	27.39	0.40						
	2	1475	2.65	34.526	27.56	1.00						

STATION 275-029 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.62		32.630		25.02	294.8	0.000	6.27	
10	10.51		32.634		25.04	292.9	0.030	6.27	
20	10.55		32.636		25.04	293.6	0.059	6.27	
30	10.55	0.00	32.640	0.000	25.04	293.5	0.089	6.27	
50	10.57	0.01	32.632	0.006	25.03	294.8	0.147	6.30	0.02
75	10.38	0.00	32.796	0.000	25.19	280.1	0.219	5.81	0.00
100	9.32	0.01	33.257	0.003	25.72	229.6	0.283	4.74	0.00
150	8.20	0.00	33.775	0.002	26.30	175.2	0.384	3.28	0.01
200	7.68	0.05	33.911	0.020	26.49	158.5	0.468	2.81	0.06
250	7.32	0.05	33.964	0.021	26.58	150.4	0.545	2.53	0.06
300	6.99	0.02	33.979	0.000	26.64	145.4	0.619	2.29	0.02
400	6.05	0.06	34.059	0.001	26.82	128.5	0.756	1.51	0.07
500	5.25	0.02	34.133	0.000	26.98	114.2	0.877	0.83	0.02
600	4.81	0.06	34.205	0.001	27.09	104.6	0.987	0.54	0.04
700	4.51	0.01	34.272	0.000	27.17	97.1	1.087	0.41	0.01
800	4.18	0.00	34.329	0.000	27.26	89.8	1.181	0.36	0.01
1000	3.56	---	34.420	-----	27.39	77.4	1.348	0.40	---
1200	3.08	---	34.484	-----	27.49	68.6	1.494	0.56	---

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STATION	275-030	OBSERVED VALUES
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DATE 1/21/61 HR 22 LAT 45-31N LONG 125-21W SDG 2103 WEA 03
SECDI 23 BA 13 CL 2 AMT 3 DRY 11.8 WET 10.3 RELHU 84 VIS 8
WVEL 3 DIR 12 SEA 1 DIR 12 SWL 7 DIR 22 WA 25.05

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	2	0	10.29	32.506	24.98	6.37	1.03	9	7.6	0.15 0.16	0.66 0.76	5.10 2.84
	2	10	10.20	32.506	25.00	6.37						
A	2	20	10.18	32.502	25.00	6.36	1.04			0.29	0.15	0.36
	2	29	10.16	32.500	25.00	6.37						
	2	31										
	2	39	10.16	32.529	25.02	6.27						
A	2	59	9.80	32.643	25.17	6.05	1.08	11	7.1	0.10	0.68	0.12
	2	62	8.64	33.062	25.68	5.20						
	2	78	8.42	33.410	25.98	4.21						
	2	98										
	2	124	8.10	33.703	26.26	3.64						
	2	148	7.74	33.867	26.44	3.05						
	1	167	7.58	33.898	26.49	2.78						
	2	173	7.58	33.926	26.51	2.83						
	1	252	6.63	33.997	26.70	2.38						
	1	427	5.19	34.075	26.94							
	1	642	4.55	34.273	27.17	0.41						
	1	903	3.88	34.382	27.33	0.31						
	1	1402	2.78	34.514	27.54	0.59						
	1	1779	2.19	34.595	27.65	1.21						

STATION 275-030 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
10	10.29		32.506		24.98	298.6	0.000	6.37	
20	10.20		32.506		25.00	297.3	0.030	6.37	
30	10.18		32.502		25.00	297.5	0.060	6.36	
	10.16	0.00	32.502	0.000	25.00	297.4	0.090	6.36	0.00
50	10.05	0.02	32.566	0.011	25.07	291.2	0.149	6.19	0.03
75	8.82	0.04	32.989	0.009	25.59	241.4	0.215	5.36	0.01
100	8.40	0.00	33.438	0.001	26.01	202.3	0.271	4.15	0.01
150	7.72	0.00	33.873	0.001	26.45	161.2	0.362	3.02	0.01
M									
200	7.25	0.01	33.948	0.003	26.58	149.8	0.439	2.57	0.07
M	6.65	0.00	33.995	0.000	26.70	139.1	0.512	2.38	0.01
M	6.15	0.00	34.020	0.006	26.78	131.4	0.579	2.07	0.03
M	5.36	0.00	34.064	0.004	26.91	119.5	0.705	1.48	0.07
500	4.90	0.04	34.141	0.008	27.03	109.3	0.819	0.98	0.07
600	4.62	0.03	34.234	0.006	27.13	100.2	0.924	0.56	0.03
700	4.39	0.00	34.305	0.003	27.21	93.2	1.020	0.34	0.02
800	4.13	0.00	34.349	0.005	27.28	87.8	1.111	0.28	0.03
1000	3.64	0.00	34.413	0.001	27.38	79.0	1.278	0.32	0.00
1200	3.19	0.01	34.469	0.002	27.47	71.0	1.428	0.40	0.00
1500	2.61	---	34.535	---	27.57	61.2	1.626	0.72	---

STATION 275-031 OBSERVED VALUES													
DATE	1/22/61	HR	03	LAT	45-41N	LONG	125-30W	SDG	2012	WEA	02		
SECD	1	BA	12	CL	1	AMT	3	DRY	10.1	WET	9.0	RELHU	87
WVEL	3	DIR	12	SEA	1	DIR	12	SWL	4	DIR	WA	05	03
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P A	2	8	9.84	32.517	25.06	6.45			0.29	0.58			
	2	10	9.83	32.515	25.06	6.46				0.58			
A	2	19	9.80	32.520	25.07	6.46							
	2	27	9.78	32.516	25.07	6.46			0.41	0.57			
A	2	38	9.78	32.513	25.07	6.44							
	2	54							0.28	0.53			
	2	57	9.77	32.540	25.09	6.34							
	2	76	9.32	32.764	25.34	5.86							
	2	96	8.40	33.552	26.10	3.90							
	2	120	8.02	33.725	26.29	3.45							
	2	144	7.70	33.809	26.40	3.11							
	2	168	7.52	33.892	26.50	2.77							
	1	193	7.38	33.928	26.54	2.64							
	1	291	6.33	34.029	26.77	1.81							
	1	485	5.10	34.152	27.01	0.73							
	1	681	4.38	34.288	27.20	0.39							
	1	926	3.70	34.394	27.36	0.36							
	1	1218	3.05	34.479	27.49	0.49							
	1	1561	2.48	34.556	27.60	0.82							
	1	1953	1.96	34.616	27.69	1.56							

STATION 275-031			INTERPOLATED AND COMPUTED VALUES						
DEPTH	TEMP.	E (T)	SAL.	E (S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E (O)
0	9.84		32.517		25.06	290.6	0.000	6.45	
10	9.83		32.515		25.06	290.8	0.030	6.46	
20	9.80	0.00	32.510	0.000	25.07	290.1	0.059	6.46	0.00
30	9.78	0.00	32.515	0.000	25.07	290.4	0.088	6.46	0.00
50	9.80	0.02	32.516	0.006	25.07	291.0	0.146	6.40	0.01
75	9.35	0.00	32.743	0.003	25.32	267.7	0.216	5.91	0.01
100	8.31	0.02	33.613	0.017	26.16	188.0	0.273	3.75	0.05
150	7.65	0.00	33.832	0.001	26.43	163.2	0.360	3.02	0.01
200	7.22	0.02	33.953	0.014	26.59	149.0	0.438	2.45	0.04
250	6.73	0.03	34.013	0.016	26.70	138.8	0.510	2.05	0.04
300	6.25	0.00	34.036	0.001	26.78	131.6	0.578	1.74	0.00
400	5.54	0.03	34.104	0.005	26.92	118.7	0.703	1.11	0.00
500	5.03	0.00	34.163	0.001	27.03	109.3	0.817	0.69	0.01
600	4.64	0.01	34.234	0.002	27.13	100.4	0.922	0.47	0.02
700	4.32	0.00	34.298	0.000	27.22	92.9	1.019	0.38	0.00
800	4.03	0.01	34.346	0.002	27.29	86.8	1.108	0.34	0.01
1000	3.52	0.00	34.419	0.001	27.39	77.1	1.272	0.38	0.00
1200	3.09	0.00	34.475	0.000	27.48	69.4	1.419	0.48	0.00
1500	2.57	0.00	34.544	0.000	27.58	60.1	1.613	0.74	0.00

STATION 275-032 OBSERVED VALUES													
DATE	1/22/61	HR	06	LAT	45-52N	LONG	125-33W	SDG	2195	WEA	02		
SECD	1	BA	13	CL	0	DIR	10.6	WET	9.4	RELHU	86	VIS	8
WVEL	3	DIR	12	SEA	1	DIR	12	SWL	1	DIR	22	WA	03.03
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	9	9.74	32.523	25.08	6.41	0.98	6	4.9	0.31	0.42		
A	2	10	9.75	32.524	25.08	6.35	1.03	6	4.1	0.32	0.45		
	2	20	9.75	32.528	25.09	6.41	1.04	7	4.9				
	2	29	9.72	32.530	25.09	6.40	0.95	6	4.7				
A	2	31	9.74	32.529	25.09	6.37	0.93	6	4.5	0.27	0.45		
	2	39	9.74	32.523	25.08	6.37	0.93	7	4.9				
A	2	58	9.39	32.694	25.27	5.96	1.15	18	6.6				
	2	62	8.44	33.497	26.05	4.01	2.12	30	24.4	0.22	0.58		
	2	97	7.82	33.710	26.31	3.64	2.24	34	28.6				
	2	123	7.60	33.884	26.48	2.77	2.52	42	30.9				
	2	146	7.31	33.945	26.57	2.61	2.62	45	29.8				
	2	171	7.04	33.942	26.60	2.55	2.55	52	47.1				
1	204												
	380	5.66	34.073	26.88	1.25	3.11	79	58.2					
1	561	4.60	34.207	27.11	0.56	3.42	111	64.9					
1	975	3.52	34.408	27.39	0.36	3.61	136	71.4					
1	1259	2.94	34.486	27.50	0.69	3.55	154	72.6					

STATION 275-032 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.74		32.523		25.08	288.6	0.000	6.41	
10	9.75		32.524		25.08	288.9	0.029	6.35	
20	9.75		32.528		25.09	288.8	0.058	6.41	
30	9.72	0.00	32.530	0.000	25.09	288.4	0.087	6.40	0.00
50	9.76	0.01	32.515	0.007	25.07	290.5	0.145	6.39	0.02
75	9.45	0.00	32.658	0.006	25.24	275.4	0.216	6.05	0.02
100	8.34	0.01	33.546	0.016	26.10	193.5	0.274	3.92	0.05
150	7.55	0.00	33.900	0.002	26.50	156.8	0.362	2.71	0.02
200	7.07	0.00	33.945	0.002	26.60	147.7	0.438	2.55	0.00
250	6.64	0.00	33.970	0.002	26.69	140.1	0.510	2.23	0.05
300	6.19	0.04	34.059	0.030	26.81	128.9	0.577	1.77	0.00
400	5.53	0.00	34.089	0.000	26.91	119.7	0.702	1.15	0.00
500	4.92	0.00	34.163	0.001	27.04	107.9	0.815	0.74	0.01
600	4.45	0.02	34.231	0.001	27.15	98.4	0.919	0.48	0.02
700	4.12	0.06	34.288	0.002	27.23	91.2	1.013	0.34	0.04
800	3.85	0.06	34.338	0.002	27.30	85.2	1.102	0.28	0.05
1000	3.46	---	34.417	---	27.40	76.6	1.263	0.37	---
1200	3.05	---	34.474	---	27.48	69.1	1.409	0.59	---

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STATION 275-033 OBSERVED VALUES									
DATE	1/22/61	HR	11	LAT	45-58N	LONG	125-21W	SDG	1463
SECD	1	BA	13	CL	AMT	DRY	10.6	WET	9.4
WVEL	2	DIR	11	SEA	DIR	SWL	DIR	WA	10.07
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
P	2	0	9.83	32.510	25.06	6.38			0.58
A	2	9							0.20
	2	10	9.81	32.514	25.07	6.38			
	2	20	9.82	32.516	25.07	6.36			
	2	29	9.82	32.518	25.07	6.36			
A	2	31						0.25	
	2	39	9.84	32.522	25.07	6.36			
	2	58	9.82	32.524	25.07	6.34			
A	2	62							0.17
	2	77	9.82	33.186	25.59	4.72			
	2	94	9.14	33.503	25.95	4.30			
	2	118	7.79	33.724	26.32	3.57			
	2	142	7.52	33.803	26.43	3.57			
	2	166	7.30	33.871	26.51	3.22			
1	189	7.20	33.891	26.54	3.17				
	1	284	6.22	33.973	26.74	2.35			
	1	479	5.16	34.146	27.00	0.76			
	1	721	4.44	34.299	27.20	0.38			
	1	1012	3.54	34.424	27.40	0.41			
	1	1205	3.12	34.476	27.48	0.58			

STATION 275-033 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.83		32.500		25.06	291.0	0.000	6.38	
10	9.81		32.514		25.07	290.6	0.030	6.38	
20	9.82	0.00	32.516		25.07	290.8	0.059	6.36	
30	9.82		32.518	0.000	25.07	290.8	0.088	6.36	0.00
50	9.83	0.00	32.483	0.027	25.04	293.9	0.146	6.45	0.06
75	9.84	0.01	33.108	0.015	25.52	248.2	0.214	4.90	0.04
100	8.77	0.05	33.577	0.004	26.06	197.5	0.270	4.09	0.03
150	7.44	0.00	33.829	0.001	26.46	160.5	0.359	3.46	0.02
M									
200	6.97	0.01	33.920	0.013	26.59	148.2	0.436	2.90	0.05
250	6.51	0.01	33.963	0.013	26.69	139.6	0.508	2.53	0.05
300	6.10	0.01	33.988	0.001	26.76	133.2	0.576	2.20	0.01
400	5.49	0.03	34.078	0.002	26.91	120.0	0.703	1.33	0.04
500	5.08	0.01	34.162	0.000	27.02	110.1	0.818	0.68	0.02
600	4.76	0.03	34.220	0.001	27.11	102.2	0.924	0.44	0.06
700	4.49	0.01	34.288	0.000	27.19	95.6	1.023	0.37	0.02
800	4.18	0.01	34.339	0.000	27.26	89.1	1.115	0.35	0.01
1000	3.57	0.00	34.420	0.000	27.39	77.7	1.282	0.40	0.00
1200	3.13	---	34.475	---	27.48	69.9	1.430	0.57	---
M									

STATION 275-034 OBSERVED VALUES

DATE	1/22/61	HR 14	LAT 46-06N	LONG 125-04W	SDG 1317	WEA 02					
SECDI	BA 14	CL	AMT 0	DRY 10.8	WET 9.8	RELHU 89					
WVEL	2 DIR 14	SEA 1	DIR 14	SWL 1	DIR 12	WA 00.03					
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	9.94	32.485	25.02	6.36			0.15	0.76	3.26
A	2	10	9.96	32.486	25.02	6.37			0.61	0.80	
	2	20	9.94	32.488	25.02	6.37					
A	2	29	9.93	32.482	25.02	6.36					
	2	31								0.67	
	2	39	9.92	32.499	25.04	6.32					
	2	58	9.62	32.802	25.32	5.86					
A	2	62	9.87	33.529	25.85	4.30			0.12	0.03	
	2	77	9.44	33.627	25.99	3.89					
	2	122	8.80	33.724	26.17	3.42					
	2	146	7.82	33.789	26.37	3.33					
	2	171	7.54	33.863	26.47	3.11					
1	1	197	7.20	33.912	26.56	2.94					
	1	295	6.38	34.001	26.74	2.02					
1	1	491	5.39	34.117	26.95	0.92					
1	1	738	4.44	34.301	27.21	0.35					
1	1	1033	3.54	34.426	27.40	0.41					
1	1	1229	3.07	34.479	27.48	0.56					

STATION 275-034 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.94		32.485		25.02	294.6	0.000	6.36	
10	9.96		32.486		25.02	295.0	0.030	6.37	
20	9.94		32.488		25.02	294.7	0.059	6.37	
30	9.93	0.00	32.481	0.001	25.02	295.3	0.089	6.36	0.00
50	9.74	0.04	32.627	0.003	25.17	281.8	0.147	6.15	0.02
75	9.85	0.02	33.457	0.016	25.79	222.6	0.210	4.46	0.04
100	9.38	0.00	33.640	0.000	26.01	202.1	0.263	3.82	0.01
150	7.75	0.02	33.802	0.001	26.39	166.9	0.355	3.30	0.00
200	7.23	0.00	33.915	0.010	26.55	152.1	0.435	2.84	0.01
250	6.76	0.00	33.976	0.013	26.67	141.9	0.508	2.40	0.01
300	6.35	0.00	34.004	0.000	26.74	135.1	0.578	1.98	0.00
400	5.78	0.03	34.067	0.005	26.86	124.5	0.707	1.33	0.02
500	5.35	0.00	34.124	0.001	26.96	116.1	0.828	0.89	0.00
600	4.94	0.01	34.200	0.005	27.07	106.5	0.939	0.58	0.01
700	4.57	0.00	34.274	0.002	27.17	97.6	1.041	0.39	0.01
800	4.23	0.00	34.334	0.001	27.25	90.1	1.135	0.32	0.02
1000	3.63	0.00	34.416	0.001	27.38	78.6	1.304	0.38	0.01
1200	3.13	---	34.473	---	27.47	70.1	1.452	0.53	---

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STATION	275-035	OBSERVED VALUES
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DATE 1/22/61 HR 18 LAT 46-12N LONG 124-47W SDG 870 WEA 02
SECDI 21 SA 15 CL AMT 0 DRY 10.8 WET 9.9 RELHU 90 VIS 8
WVVEL 4 DIR 14 SEA 1 DIR 14 SWL 1 DIR 22 WA 04.03

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	2	0	10.34	32.600	25.04	6.36	1.06	6	5.9	0.60	0.82	4.50
	2	9					0.89	15		0.31	0.85	2.56
		10	10.30	32.598	25.05	6.37	0.93	8	5.8			
A	2	20	10.36	32.600	25.04	6.36	1.00	8	4.8			
	28											
	29	10.54	32.618	25.02	6.34	1.00	15	6.6	0.52	0.70	0.28	
	38	10.57	32.669	25.06	6.24	1.00	9	5.4				
A		57										
	2	58	10.57	32.737	25.11	6.12	1.06	11	6.4	0.17	0.78	0.00
	2	77	10.04	33.150	25.52	5.18	1.52	18	11.8			
	2	97	9.16	33.310	25.79	4.68	1.67	19	17.3			
	2	121	8.85	33.578	26.05	3.84	2.12	33	21.6			
	2	145	8.38	33.740	26.25	3.36	2.18	33	23.9			
	2	170	7.94	33.865	26.41	2.94	2.36	37	14.4			
	1	194	7.77	33.889	26.46	2.80	2.30	42	6.6			
	1	290	7.08	34.009	26.65	2.38	2.31	41	40.1			
	1	485	5.36	34.141	26.97	1.01	3.10	82	60.7			
	1	633	4.40			0.56	3.58	113	72.0			

STATION 275-035 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.34		32.590		25.04	292.4	0.000	6.36	
10	10.30		32.598		25.05	292.1	0.030	6.37	
20	10.36		32.590		25.04	293.2	0.059	6.36	
30	10.55	0.00	32.623	0.001	25.03	294.7	0.088	6.33	0.00
50	10.61	0.02	32.691	0.018	25.07	291.1	0.147	6.21	0.04
75	10.11	0.00	33.105	0.009	25.48	253.0	0.215	5.29	0.02
100	9.10	0.02	33.344	0.003	25.83	219.8	0.274	4.57	0.01
150	8.28	0.01	33.771	0.002	26.29	176.8	0.373	3.26	0.01
200	7.63	0.07	33.939	0.022	26.52	155.9	0.456	2.70	0.08
250	7.26	0.08	34.006	0.026	26.62	146.5	0.532	2.44	0.10
300	6.99	0.01	34.019	-----	26.67	142.5	0.604	2.31	0.01
400	6.10	0.04	34.102	-----	26.85	126.0	0.739	1.60	0.06
500	5.25	-----						0.94	-----
600	4.59	-----						0.62	-----

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STATION 275-036 OBSERVED VALUES

DATE 1/22/61 HR 21 LAT 46-17N LONG 124-33W SDG 142 WEA 02
 SECD1 BA 15 CL 2 AMT 1 DRY 10.6 WET 8.3 RELHU 74 VIS 8
 WVEL 5 DIR 14 SEA 1 DIR 14 SWL 1 DIR 22 WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	10.46	32.601	25.02	6.27				0.13	1.25	
	3	10.44	32.594	25.02	6.27						
	6	10.44	32.596	25.02	6.27						
A	8								0.23	0.98	
	10	10.42	32.598	25.03	6.27						
	15	10.42	32.594	25.03	6.26						
	20	10.40	32.592	25.03	6.26						
A	25	10.40	32.591	25.03	6.25						
	26										
	30	10.38	32.595	25.03	6.27			0.39	0.39	0.73	
	40	10.37	32.597	25.04	6.27						
A	52										
	60	10.41	32.603	25.03	6.24						
	80	10.37	32.722	25.13	5.88						
	100	9.84	33.085	25.51	5.02						
	125	9.34	33.414	25.84	4.41			0.30	0.30	0.61	

STATION 275-036 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.46		32.601		25.02	294.3	0.000	6.27	
10	10.42		32.598		25.03	294.1	0.030	6.27	
20	10.40		32.592		25.03	294.4	0.059	6.26	
30	10.38		32.595		25.03	294.0	0.089	6.27	
50	10.39	0.01	32.593	0.005	25.03	294.8	0.148	6.28	0.01
75	10.41	0.01	32.676	0.004	25.09	289.4	0.221	6.01	0.01
100	9.84		33.085		25.51	250.5	0.288	5.02	

STATION 275-037 OBSERVED VALUES

DATE	1/22/61	HR	23	LAT	46-21N	LONG	124-24W	SDG	97	WEA	
SECD	1	BA	15	CL	AMT	DRY	WET	RELHU	8	VIS	
WVEL	5	DIR	14	SEA	1	DIR	14	SWL	1	DIR	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.52	27.162	20.95	6.78				0.69	2.59	
A	1	9.54	27.394	21.13	6.76				0.37	2.51	
A	4	9.52	27.527	21.23	6.74				0.34	1.96	
A	1	9.64	28.202	21.74	6.69				0.42	1.42	
	14	9.99	30.654	23.59	6.46						
	18	10.14	30.894	23.75	6.46						
	23	10.32	31.919	24.52	6.36						
	27	10.32	32.025	24.60	6.36						
	36	10.34	32.204	24.74	6.34						
	54	10.36	32.391	24.88	6.28						
	70	10.38	32.503	24.96	6.24						

STATION 275-037 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.52	0.01	27.162	0.108	20.95	683.9	0.000	6.78	0.01
10	9.71	0.01	28.722	0.072	22.13	570.6	0.063	6.64	0.01
20	10.22	0.00	31.315	0.001	24.07	386.1	0.111	6.42	0.01
30	10.33	0.00	32.092	0.005	24.65	330.3	0.147	6.36	0.00
50	10.36	0.00	32.362	0.005	24.86	311.3	0.211	6.29	0.00

STATION 275-038 OBSERVED VALUES													
DATE	1/23/61	HR	01	LAT	46-25N	LONG	124-11W	SDG	38	WEA	02		
SECDI	4	BA	15	CL	1	AMT	1	DRY	10.4	WET	8.9	RELHU	82
WVEL		DIR		SEA	0	DIR		SWL	1	DIR	22	WA	02
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1												
A	2	9.62	27.574	21.25	6.74	1.04	38	8.6	0.45	1.72			
	3	9.79	28.468	21.92	6.65	0.88	38	9.1	1.29	1.71			
A	5												
	6	9.85	28.764	22.14	6.63	0.81	31	7.7	0.46	1.86			
A	10	9.92	29.243	22.50	6.58	1.11	33	6.6					
	11								0.42	1.38			
	15	10.10	30.551	23.49	6.47	1.15	24	6.2					
	20	10.09	30.781	23.67	6.44	1.02	22	6.4					
	24	10.09	30.799	23.69	6.43	1.00	28	6.4					
	29	10.14	30.977	23.82	6.34	0.81	15	5.9					
	32	10.24	31.757	24.41	6.24	1.03	16	6.7					

STATION 275-038 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.62		27.574		21.25	654.6	0.000	6.74	
10	9.92		29.243		22.50	535.0	0.060	6.58	
20	10.09		30.781		23.67	423.6	0.108	6.44	
30	10.17	----	31.181	-----	23.97	395.3	0.149	6.31	----

STATION 275-039 OBSERVED VALUES

DATE 1/23/61 HR 04 LAT 46-10N LONG 124-11W SDG 47 WEA 02
 SECDI BA 14 CL 3 AMT 6 DRY 10.2 WET 7.2 RELHU 66 VIS 8
 WVEL 5 DIR 20 SEA 2 DIR 20 SWL 1 DIR 22 WA 28

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	9.36	26.855	20.73	6.74	1.24	46	8.9	0.55	1.46
A	1	2	9.49	27.632	21.32	6.70	1.21	45	8.0	0.67	1.67
A	1	5	9.90	30.328	23.35	6.52	1.18	24	7.7	0.59	1.85
A	1	6	10.02	31.538	24.27	6.45	1.27	17	6.8	0.25	0.63
		9									
		11									
		14	10.14	32.118	24.70	6.34	1.10	11	7.0		
		18	10.25	32.313	24.84	6.27	1.01	12	6.1		
		22	10.26	32.388	24.89	6.27	1.01	17	6.4		
		26	10.28	32.421	24.92	6.32	1.12	18	6.4		
		31	10.26	32.428	24.92	6.23	1.06	19	6.6		
		35	10.32	32.467	24.94	6.19	1.19	10	5.9		

STATION 275-039 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.36		26.855		20.73	704.5	0.000	6.74	0.00
10	10.05	0.00	31.741	0.038	24.43	351.6	0.053	6.43	0.00
20	10.26	0.00	32.361	0.003	24.87	309.3	0.086	6.26	0.00
30	10.26	0.00	32.426	0.002	24.92	304.6	0.117	6.25	0.01

STATION 275-040 OBSERVED VALUES													
DATE	1/23/61	HR	06	LAT	46-02N	LONG	124-06W	SDG	71	WEA	02		
SECD1	BA	14	CL	AMT	0	DRY	9.9	WET	8.2	RELHU	80	VIS	
WVEL	3	DIR	07	SEA	1	DIR	07	SWL	2	DIR	20	WA	02
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	0	10.06	32.078	24.69	6.45			0.29	1.30			
A	1	3	10.07	32.080	24.69	6.46			0.34	1.48			
A	5												
1	6	10.16	32.165	24.74	6.44				0.31	1.17			
1	10	10.40	32.526	24.98	6.32				0.15	0.68			
A	11												
1	15	10.41	32.571	25.01	6.27								
1	20	10.42	32.573	25.01	6.28								
1	24	10.40	32.573	25.01	6.27								
1	29	10.41	32.575	25.01	6.27								
1	39	10.38	32.570	25.01	6.27								
1	59	10.40	32.576	25.02	6.27								

STATION 275-040 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.06		32.078		24.69	326.6	0.000	6.45	
10	10.40		32.526		24.98	299.1	0.032	6.32	
20	10.42		32.573		25.01	296.1	0.062	6.28	
30	10.41	0.00	32.575	0.000	25.01	296.0	0.091	6.27	0.00
50	10.38	---	32.571	---	25.02	296.2	0.150	6.27	---

STATION 275-041 OBSERVED VALUES

DATE 1/23/61 HR 08 LAT 45-52N LONG 124-00W SDG 37 WEA 02
 SECD1 BA 16 CL 0 DRY 11.8 WET 9.5 RELHU 74 VIS 6
 WVEL 9 DIR 22 SEA 1 DIR 22 SWL 5 DIR 18 WA 02

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	10.04	31.222	24.02	6.69				0.50	1.67	
A 1	3	10.04	31.224	24.02	6.69				0.52	1.59	
	4										
1	6	10.16	31.731	24.40	6.52						
1	10	10.38	31.998	24.57	6.47						
A 1	13								0.61	1.61	
1	15	10.43	32.133	24.67	6.43						
1	20	10.52	32.388	24.85	6.33						
1	24	10.58	32.545	24.96	6.24						
A 1	27								0.31	0.51	
1	29	10.64	32.589	24.98	6.23						

STATION 275-041 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.04		31.222		24.02	389.8	0.000	6.69	
10	10.38		31.998		24.57	337.8	0.037	6.47	
20	10.52		32.388		24.85	311.4	0.069	6.33	

STATION 275-042 OBSERVED VALUES

DATE 1/23/61 HR 11 LAT 45-57N LONG 124-13W SDG 55 WEA 03
 SECDI BA 17 CL 6 AMT 6 DRY 11.7 WET 9.5 RELHU 76 VIS 6
 WVEL 7 DIR 18 SEA 2 DIR 18 SWL 5 DIR 18 WA --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.46	32.616	25.04	6.26			0.40	0.76	
A	1	3	10.46	32.611	25.03	6.26			0.28	0.71	
		4									
	1	6	10.48	32.614	25.03	6.25					
A	1	10	10.48	32.619	25.04	6.27					
		13									
	1	15	10.46	32.614	25.03	6.27			0.32	0.82	
	1	20	10.46	32.611	25.03	6.27					
A	1	24	10.47	32.706*	25.03	6.27					
		27									
	1	29	10.46	32.615	25.04	6.27			0.34	0.71	
	1	39	10.44	32.616	25.04	6.26					
	1	49	10.47	32.614	25.03	6.25					

STATION 275-042 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.46		32.616		25.04	293.2	0.000	6.26	
10	10.48		32.619		25.04	293.5	0.030	6.27	
20	10.46		32.611		25.03	294.0	0.059	6.27	
30	10.46	0.00	32.600	0.004	25.03	294.2	0.089	6.27	0.00

STATION 275-043 OBSERVED VALUES

DATE 1/23/61 HR 14 LAT 46-05N LONG 124-32W SDG 133 WEA 50
 SECD1 BA 17 CL 6 AMT 8 DRY 11.1 WET 10.5 RELHU 93 VIS 6
 WVEL 8 DIR 18 SEA 1 DIR 18 SWL 1 DIR 25 WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.35	32.591	25.04	6.32			0.32	0.93	
A	1	3	10.36	32.608	25.05	6.32			0.26	0.97	
		4									
	1	6	10.34	32.591	25.04	6.31					
A	1	10	10.34	32.596	25.04	6.31			0.41	1.10	
		13									
	1	15	10.34	32.601	25.05	6.32					
	1	20	10.34	32.599	25.04	6.33					
A	1	24	10.36	32.603	25.04	6.32			0.33	1.30	
		27									
	1	29	10.36	32.600	25.04	6.32					
	1	39	10.36	32.602	25.04	6.29					
		58	10.40	32.616	25.05	6.25					
	1	77	10.38	32.772	25.17	5.90					
		96	9.76	33.111	25.54	4.95					
	1	120	8.81	33.522	26.01	3.83					

STATION 275-043 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.35		32.591		25.04	293.3	0.000	6.32	
10	10.34		32.596		25.04	292.9	0.030	6.31	
20	10.34		32.599		25.04	292.9	0.059	6.33	
30	10.36	0.00	32.590	0.000	25.04	293.4	0.088	6.32	0.00
50	10.38	0.00	32.601	0.005	25.04	294.1	0.147	6.28	0.01
75	10.40	0.01	32.748	0.001	25.15	283.9	0.219	5.96	0.00
100	9.61	---	33.181	---	25.62	239.8	0.285	4.76	---

STATION 275-044 OBSERVED VALUES

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DATE 1/23/61 HR 23 LAT 46-26N LONG 125-21W SDG 2012 WEA 03
SECD1 BA 20 CL 6 AMT 5 DRY 11.4 WET 10.7 RELH 92 VLS 6
WVFL 3 DIR 18 SEA 3 DIR 18 SWL 3 DIR 25 WA 10.0 -- --.05

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	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	4	0	9.97	32.516	25.04	6.41	1.03	13	7.8	0.12	0.62	4.56
	4	9	9.88	32.518	25.06	6.38	1.04	13	8.6	0.22	0.64	3.42
	4	10		6.40								
A	4	20	9.84	32.520	25.07	6.42						
	4	29	9.82	32.513	25.06	4.46						
	4	31	9.84	32.518	25.06	3.78						
	4	39		33.283	26.20							
A	4	59	9.82	32.513	25.06	6.34	1.47	20	9.6	0.09	0.13	0.00
	4	62	8.62	33.283	25.86	4.46						
	4	78	8.08	33.622	26.20	3.78						
	4	98	7.78	33.717	26.32	3.62						
	4	122	7.51	33.855	26.47	3.11	1.47	20	9.6	0.09	0.13	0.00
	4	147	7.26	33.926	26.56	2.68						
	4	171	7.19	33.943	26.58	2.58						
	1	195		34.005	26.75	1.68						
	1	291	6.30	34.131	26.97	0.67	1.47	20	9.6	0.09	0.13	0.00
	1	486	5.29	34.288	27.21	0.32						
	1	730	4.34	34.421	27.39	0.32						
	2	1031	3.55	34.552	27.60	0.97						
	3	1571	2.48	34.552	27.60	0.97	1.47	20	9.6	0.09	0.13	0.00
	3	1961	2.06	34.599	27.67	1.33						

STATION 275-044 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.97		32.516		25.04	292.7	0.000	6.41	
10	9.88		32.518		25.06	291.4	0.030	6.38	
20	9.84		32.510		25.07	290.8	0.059	6.40	
30	9.82	0.00	32.513	0.000	25.06	291.2	0.088	6.42	0.00
50	9.91	0.05	32.465	0.035	25.01	296.6	0.147	6.50	0.08
75	8.83	0.04	33.151	0.026	25.72	229.5	0.212	4.78	0.07
100	8.05	0.00	33.636	0.005	26.22	182.6	0.264	3.76	0.01
150	7.47	0.00	33.867	0.000	26.48	158.2	0.349	3.05	0.00
200	7.15	0.01	33.946	0.000	26.59	145.9	0.425	2.54	0.01
250	6.72	0.05	33.979	0.000	26.67	137.9	0.496	2.10	0.04
300	6.24	0.01	34.011	0.000	26.76	133.2	0.564	1.61	0.00
400	5.66	0.03	34.075	0.000	26.89	122.3	0.692	1.01	0.02
500	5.23	0.00	34.141	0.000	26.99	113.3	0.809	0.63	0.01
600	4.81	0.00	34.207	0.002	27.09	104.4	0.918	0.42	0.03
700	4.44	0.00	34.260	0.001	27.18	96.3	1.019	0.33	0.01
800	4.13	0.01	34.324	0.001	27.26	89.6	1.112	0.29	0.01
1000	3.62	0.00	34.400	0.000	27.38	78.9	1.280	0.30	0.00
1200	3.16	0.00	34.474	0.002	27.47	70.4	1.430	0.49	0.04
1500	2.59	0.00	34.541	0.001	27.58	60.6	1.626	0.87	0.02

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STATION 275-045										OBSERVED VALUES									
DATE	1/24/61	HR	03	LAT	46-36N	LONG	125-40W	SDG	2149	WEA	01								
SECD1	BA	24	CL	6	AMT	2	DRY	10.0	WET	9.7	RELHU	96							
WVEL	DIR	SEA	1	DIR	SWL	1	DIR	21	WA	15.10	VIS	8							
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S								
P	2	0	10.12	32.566	25.06	6.36	1.06	11	5.9	0.34	0.80								
A	2	9								0.47	0.95								
	2	10	10.10	32.571	25.06	6.35	0.88	9	6.6										
	2	20	10.08	32.568	25.06	6.34	0.87	8	6.0										
	2	29	10.05	32.567	25.07	6.34	0.95	10	6.4										
A	2	31								0.27	0.90								
	2	39	10.06	32.566	25.07	6.32	0.98	10	6.8										
	2	58	10.18	32.899	25.30	5.66	1.04	13	9.6										
A	2	62								0.12	0.07								
	2	77	9.65	33.270	25.68	5.06	1.48	17	13.8										
	2	97	8.52	33.367	25.94	4.62	1.77	24	16.3										
	2	120	8.28	33.673	26.21	3.54	2.08	32	20.1										
	2	145	7.88	33.811	26.38	3.06	2.26	39	22.9										
	2	168	7.42	33.877	26.50	3.00	2.27	33	20.4										
1	196	7.36	33.920	26.54	2.60	2.20	2.20	45	25.0										
	1	293																	
	1	474	6.48	34.006	26.73	1.96	2.52	66											
	1	711	5.44	34.126	26.95	0.94	3.04	181											
	1	996	4.38	34.264	27.18	0.42	3.22	114											
	1		3.61	34.416	27.38	0.36	3.36	133											
	1	1517	2.58	34.539	27.58	0.82	2.88	137											
	1	1897	2.08	34.593	27.66	1.34	3.11	177											

STATION 275-045 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.12		32.566		25.06	291.4	0.000	6.36	
10	10.10		32.571		25.06	290.9	0.030	6.35	
20	10.08		32.568		25.06	291.0	0.059	6.34	
30	10.05	0.00	32.564	0.002	25.07	291.0	0.088	6.34	0.00
50	10.16	0.03	32.720	0.016	25.18	280.9	0.145	5.98	0.04
75	9.73	0.00	33.236	0.005	25.64	237.1	0.210	5.12	0.00
100	8.46	0.02	33.406	0.007	25.98	205.6	0.265	4.48	0.02
150	7.77	0.01	33.829	0.001	26.41	165.1	0.358	3.04	0.02
M									
200	7.05	0.08	33.930	0.011	26.59	148.4	0.436	2.78	0.05
250	6.64	0.09	33.986	0.013	26.69	139.7	0.508	2.37	0.06
300	6.43	0.00	34.011	0.000	26.74	135.7	0.577	1.91	0.00
400	5.81	0.02	34.081	0.002	26.87	123.8	0.707	1.31	0.01
M									
500	5.31	0.00	34.142	0.000	26.98	114.2	0.826	0.85	0.01
600	4.83	0.00	34.201	0.000	27.08	105.1	0.935	0.58	0.02
700	4.42	0.00	34.258	0.000	27.17	97.0	1.036	0.43	0.00
800	4.10	0.01	34.315	0.002	27.25	89.9	1.130	0.36	0.01
1000	3.60	0.00	34.417	0.000	27.39	78.2	1.298	0.36	0.00
1200	3.15	0.00	34.479	0.006	27.48	69.8	1.446	0.48	0.02
1500	2.61	0.00	34.537	0.001	27.57	61.1	1.642	0.80	0.00

STATION 275-046

DATE 1/24/61 HR 08 LAT 46-39N LONG 125-09W SDG 988 WEA 01
SECDI BA 24 CL 6 AMT 2 DRY 10.4 WET 10.1 RELHU 96 VIS 5
WVEL 1 DIR 11 SEA 1 DIR 11 SWL 1 DIR 47 WA 08, ---

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	2	0	9.85	32.514	25.06	6.40				0.31	0.55	
	2	10	9.84	32.511	25.06	6.38				0.26	0.65	
A	2	20	9.84	32.512	25.06	6.34						
	2	29	9.82	32.514	25.06	6.34						
	2	31	9.84	32.518	25.06	6.34				0.65	0.63	
A	2	59	9.82	32.516	25.07	6.34						
	2	62	10.04	33.332	25.66	4.89				0.31	0.62	
	2	78	8.76	33.473	25.98	4.17						
	2	123	8.29	33.648	26.19	3.64						
	2	147	8.01	33.780	26.34	3.17						
	2	172	7.66	33.839	26.43	3.02						
	1	196	7.23	33.923	26.56	2.73						
	1	294	6.50	34.001	26.72	2.00						
1	488	5.34	34.114	26.96	1.03							
1	731	4.25	34.273	27.20	0.50							
1	927	3.76	34.377	27.34	0.40							

STATION 275-047 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.12		32.558		25.05	292.0	0.000	6.33	
10	10.12		32.554		25.05	292.5	0.030	6.34	
20	10.12		32.551		25.04	292.9	0.059	6.32	
20	10.12		32.551		25.04	292.9	0.059	6.32	
30	10.09	0.00	32.555	0.000	25.05	292.3	0.088	6.29	0.00
50	10.12		32.558		25.05	292.0		6.33	
	10.17	0.01	32.545	0.015	25.03	294.8	0.147	6.33	0.03
M	9.97	0.00	32.918	0.007	25.35	264.4	0.217	5.64	0.01
M	9.49	0.01	33.348	0.001	25.77	225.0	0.278	4.81	0.01
M	8.16	0.00	33.709	0.002	26.26	179.6	0.379	3.41	0.01

STATION 275-048 OBSERVED VALUES

DATE 1/24/61 HR 16 LAT 46-47N LONG 124-27W SDG 86 WEA 01
 SECDI BA 23 CL 6 AMT 7 DRY 7.8 WET 7.7 RELHU 99 VIS 6
 WVEL 3 DIR 04 SEA 1 DIR 04 SWL 1 DIR 27 WA 03

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.18	32.428	24.94	6.40			0.63	1.69	
	1	3	10.21	32.433	24.94	6.38					
	1	6	10.20	32.433	24.94	6.35					
A	1	9							0.32	1.76	
	1	10	10.20	32.429	24.94	6.38					
	1	15	10.29	32.494	24.97	6.34					
	1	20	10.30	32.582	25.04	6.28					
	1	24	10.32	32.584	25.04	6.27					
	1	29	10.32	32.601	25.05	6.27					
A	1	31							0.24	0.64	
	1	39	10.32	32.605	25.05	6.22					
	1	59	10.39	32.638	25.07	6.07					
A	1	62							0.06	0.31	
	1	68	10.38	32.676	25.10	5.96					

STATION 275-048 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.18		32.428		24.94	302.6	0.000	6.40	
10	10.20		32.429		24.94	303.0	0.031	6.38	
20	10.30	0.00	32.582		25.04	293.5	0.061	6.28	
30	10.32	0.00	32.602	0.001	25.05	292.5	0.090	6.27	0.00
50	10.36	0.01	32.617	0.002	25.05	292.5	0.148	6.15	0.00

STATION 275-049 OBSERVED VALUES

DATE 1/24/61 HR 18 LAT 46-50N LONG 124-13W SDG 38 WEA 03
 SECDI 3 BA 23 CL 6 AMT 7 DRY 7.0 WET 6.7 RELHU 96 VIS 5
 WVEL 5 DIR 06 SEA 2 DIR 06 SWL 2 DIR 24 WA --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	9.31	28.170	21.76	6.79			0.58	8.39	
A	1	3	9.36	28.375	21.92	6.75			0.46	9.83	
A	1	4	9.60	29.021	22.38	6.64			0.69	7.26	
A	1	8	9.86	29.945	23.06	6.50			0.34	4.40	
1	15	10.04	30.778	23.68	6.43						
1	20	10.21	31.486	24.20	6.26						
1	24	10.36	32.199	24.73	6.23						
1	29	10.39	32.306	24.81	6.19						

STATION 275-049 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.31		28.160		21.76	605.7	0.000	6.79	
10	9.86		29.945		23.06	481.9	0.055	6.50	
20	10.21		31.486		24.20	373.2	0.098	6.26	

STATION 275-050 OBSERVED VALUES

DATE 1/24/61 HR 20 LAT 46-57N LONG 124-18W SDG 37 WEA 02
 SECD 1 4 BA 23 CL 6 AMT 7 DRY 6.7 WET 6.5 RELHU 97 VIS 7
 WVEL 9 DIR 06 SEA 2 DIR 06 SWL 2 DIR 25 WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	1	9.20	27.785	21.48	6.80	1.15	46		2.00	7.21	22.30
A	1	9.42	28.612	22.09	6.70	1.09	44		1.02	5.16	8.02
A	5	9.57	29.177	22.51	6.65	1.15	40		0.91	3.66	0.98
C	1	9.76	30.157	23.24	6.54	1.07	35		0.56	2.64	0.10
	15	9.98	30.999	23.86	6.41						
	20	10.21	31.805	24.45	6.33						
	24	10.23	32.298	24.83	6.18						
	29	10.38	32.387	24.87	6.17						

STATION 275-050 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.20		27.785		21.48	632.9	0.000	6.80	
10	9.76		30.157		23.24	464.7	0.055	6.54	
20	10.21		31.805		24.45	349.6	0.096	6.33	

STATION 275-051 OBSERVED VALUES

DATE 1/24/61 HR 22 LAT 47-12N LONG 124-22W SDG 38 WEA 03
 SECDI 6 BA 22 CL 0 AMT 7 DRY 8.1 WET 7.2 RELHU 91 VIS 7
 WVEL SEA 2 DIR SWL 2 DIR 25 WA 04

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.28	28.255	21.83	6.71	1.09	37	6.4	1.49	2.62	
A	2								0.87	3.40	
	3	9.26	28.259	21.84	6.72	1.12	37	6.4			
	6	9.42	28.764	22.21	6.66	1.91	33	13.6			
A	8								0.74	2.42	
	10	9.65	29.562	22.79	6.57	1.11	30	6.6			
	15	9.70	29.844	23.01	6.54	1.08	29	6.4			
A	16								0.47	1.33	
	20	9.87	30.413	23.42	6.54	1.08	24	7.6			
	24	9.90	30.913	23.81	6.44	1.10	21	6.4			
	29	10.13	31.844	24.49	6.22	1.11	22	6.4			

STATION 275-051 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.28		28.255		21.83	599.0	0.000	6.71	
10	9.65		29.562		22.79	507.2	0.056	6.57	
20	9.87		30.413		23.42	447.5	0.104	6.54	

STATION 275-052 OBSERVED VALUES

DATE 1/25/61 HR 00 LAT 47-11N LONG 124-36W SDG 79 WEA 02
 SECD 10 BA 21 CL 6 AMT 7 DRY 7.9 WET 7.2 RELHU 91 VIS 6
 WVEL 5 DIR 07 SEA 1 DIR 07 SWL 1 DIR 23 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	32.289	24.83	6.40				0.34	1.67	
A	1	3	32.282	24.83	6.40				0.32	1.75	
		4									
	1	6	32.331	24.86	6.38						
	1	10	32.527	25.00	6.34						
A	1	14									
	1	15	32.584	25.04	6.29				0.47	1.68	
	1	20	32.582	25.04	6.29						
	1	24	32.585	25.06	6.28						
A	1	27									
	1	29	32.581	25.06	6.32				0.61	0.90	
	1	39	32.563	25.06	6.32						
	1	59	32.575	25.07	6.33						

STATION 275-052 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.15		32.289		24.83	312.4	0.000	6.40	
10	10.26		32.527		25.00	296.7	0.031	6.34	
20	10.27		32.582		25.04	293.0	0.060	6.29	
30	10.14	0.00	32.579	0.000	25.06	291.4	0.090	6.32	0.00
50	10.03	-.--	32.562	-.---	25.07	291.3	0.148	6.32	-.---

STATION 275-053 OBSERVED VALUES

DATE	1/25/61	HR	02	LAT	47-10N	LONG	124-56W	SDG	183	WEA	01			
SECD1	BA	20	CL	6	AMT	2	DRY	8.1	WET	7.2	RELHU	88	VIS	7
WVEL	5	DIR	05	SEA	1	DIR	05	SWL	1	DIR	26	WA	03	07
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	1	10.30	32.541	25.01	6.33				1.00	1.08				
A	1	10.31	32.525	24.99	6.33				0.94	1.12				
	4													
	6	10.30	32.531	25.00	6.34									
A	1	10.28	32.529	25.00	6.33									
	13													
	15	10.18	32.531	25.02	6.41				0.64	1.24				
	20	10.10	32.553	25.05	6.41									
A	2	10.06	32.556	25.06	6.41									
	24													
	27	10.06	32.558	25.06	6.38				0.47	0.63				
	29													
	39	10.02	32.566	25.07	6.36									
	59	10.02	32.576	25.08	6.32									
	79	9.73	32.832	25.33	5.89									
	98	9.44	33.106	25.59	5.32									
	122	8.88	33.477	25.97	4.08									
	147	8.43	33.641	26.16	3.14									
	166	8.30	33.818	26.32										

STATION 275-053 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.30		32.541		25.01	296.2	0.000	6.33	
10	10.28		32.529		25.00	296.9	0.030	6.33	
20	10.10		32.553		25.05	292.4	0.060	6.41	
30	10.06	0.00	32.559	0.000	25.06	291.5	0.089	6.38	0.00
50	10.03	0.02	32.557	0.010	25.06	291.6	0.147	6.36	0.02
75	9.80	0.01	32.760	0.006	25.27	272.7	0.218	6.00	0.01
100	9.40	0.00	33.140	0.003	25.62	239.4	0.282	5.22	0.01
150	8.40	---	33.666	---	26.19	186.3	0.388	3.28	---

STATION 275-054	OBSERVED VALUES
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DATE 1/25/61 HR 07 LAT 47-13N LONG 125-20W SDG 1463 WEA 02
SECDI BA 19 CL AMT 0 DRY 8.1 WET 7.2 RELHU 88 VIS 6
WVEL 8 DIR 09 SEA 2 DIR 09 SWL 2 DIR 24 WA 25, 27, 18

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	3	0	9.88	32.537	25.07	6.42				0.38	0.72	
	3	10	9.88	32.540	25.07	6.41				0.30	0.69	
A	3	20	9.90	32.542	25.07	6.41						
	3	29	9.88	32.551	25.08	6.41						
	3	31										
A	3	39	9.88	32.557	25.09	6.41				0.46	0.60	
	3	58	9.86	32.569	25.10	6.37						
A	3	62										
	3	77	9.12	32.814	25.41	5.69					0.22	
	3	97	8.30	33.316	25.93	4.41				0.17		
A	3	120	8.12	33.551	26.14	3.83						
	3	144	7.70	33.744	26.35	3.25						
	3	168	7.48	33.844	26.46	2.96						
	1	172	7.33	33.823	26.47	3.15						
	1	257	6.65	33.969	26.68	2.37						
A	2	385	5.78	34.056	26.86	1.40						
	2	599	4.72	34.187	27.08	0.78						
	2	857	3.89	34.333	27.29	0.52						
A	2	1162	3.23	34.456	27.45	0.50						

STATION 275-054 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.88		32.537		25.07	289.8	0.000	6.42	
10	9.88		32.530		25.07	289.7	0.029	6.41	
20	9.90		32.542		25.07	290.1	0.058	6.41	
30	9.88	0.00	32.552	0.000	25.08	289.2	0.087	6.41	0.00
50	9.91	0.03	32.540	0.009	25.08	290.3	0.145	6.43	0.02
75	9.22	0.01	32.777	0.000	25.37	263.1	0.215	5.79	0.00
100	8.26	0.02	33.358	0.006	25.97	206.2	0.273	4.31	0.02
150	7.62	0.00	33.760	0.005	26.39	167.4	0.367	3.19	0.03
200	7.14	0.03	33.906	0.018	26.56	151.5	0.446	2.77	0.07
250	6.71	0.00	33.966	0.005	26.67	142.0	0.520	2.41	0.01
300	6.34	0.00	34.007	0.006	26.75	134.7	0.589	2.01	0.01
400	5.69	0.00	34.066	0.000	26.87	123.5	0.718	1.33	0.01
500	5.16	0.01	34.128	0.000	26.99	113.4	0.836	0.97	0.04
600	4.72	0.00	34.188	0.000	27.09	104.7	0.946	0.78	0.00
700	4.35	0.01	34.247	0.001	27.17	97.0	1.046	0.63	0.01
800	4.04	0.01	34.303	0.001	27.25	90.1	1.140	0.54	0.01
1000	3.54	---	34.397	---	27.38	78.9	1.309	0.47	---

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STATION 275-055 OBSERVED VALUES														
DATE	1/25/61	HR	15	LAT	47-17N	LONG	126-10W	SDG	2195	WEA	02			
SECDI	16	BA	19	CL	6	AMT	3	DRY	8.2	WET	7.4	RELHU	90	VIS
WVEL	5	DIR	09	SEA	2	DIR	09	SWL	DIR	WA	10, 10			
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	2	0	9.96	32.576	25.09	6.38	0.98	8	6.0	0.32	1.48			
A	2	10	9.96	32.573	25.09	6.38	0.99	9	7.2	0.47	1.11			
	20	9.97	32.577	25.09	6.37	0.82	0.82	9	5.5					
	29	9.96	32.583	25.10	6.38	1.06	1.06	11	5.9					
A	2	31	9.98	32.578	25.09	6.34	1.05	11	5.9	0.44	1.33			
	39	9.96	32.576	25.09	6.38	0.98	0.98	8	6.0					
	59	9.96	32.615	25.12	6.22	1.00	1.00	10	6.6					
A	2	62	9.39	33.138	25.62	5.07	1.52	19	12.3	0.23	0.55			
	78	8.52	33.464	26.01	4.19	2.03	2.03	29	19.8					
	122	8.33	33.710	26.23	3.47	2.20	2.20	33						
	147	8.04	33.822	26.36	3.02	2.39	2.39	41	26.1					
	172	7.53	33.857	26.47	2.99	1.94	1.94	33	19.8					
	193	7.38	33.906	26.53	2.88	1.69	1.69	40	23.2					
	290	6.54	34.017	26.73	1.96	2.54	2.54	59						
	486	5.26	34.127	26.98	0.88	3.04	3.04	89						
	728	4.24	34.267	27.20	0.40	3.30	3.30	121						
	1023	3.52	34.415	27.39	0.36	3.53	3.53	137						
	1563	2.47	34.539	27.59	0.78	2.80	2.80	142						
	1953	1.98	34.612	27.68	1.44	3.08	3.08	180						

STATION 275-055 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.96		32.576		25.09	288.1	0.000	6.38	
10	9.96		32.573		25.09	288.6	0.029	6.38	
20	9.97		32.577		25.09	288.6	0.058	6.37	
30	9.96	0.00	32.582	0.000	25.09	288.3	0.087	6.38	0.00
50	10.01	0.02	32.562	0.019	25.07	290.9	0.145	6.35	0.04
75	9.51	0.01	33.047	0.015	25.53	247.6	0.212	5.27	0.03
100	8.49	0.01	33.490	0.000	26.04	199.8	0.268	4.12	0.00
150	7.98	0.01	33.828	0.002	26.38	168.2	0.360	3.01	0.01
200	7.18	0.07	33.899	0.002	26.55	152.6	0.440	2.80	0.05
250	6.74	0.08	33.967	0.002	26.66	142.2	0.514	2.38	0.07
300	6.46	0.00	34.024	0.001	26.74	135.1	0.583	1.88	0.00
400	5.76	0.01	34.088	0.006	26.88	122.7	0.712	1.25	0.02
500	5.19	0.00	34.135	0.000	26.99	113.2	0.830	0.83	0.00
600	4.72	0.01	34.194	0.001	27.09	104.3	0.939	0.57	0.02
700	4.33	0.00	34.251	0.000	27.18	96.5	1.039	0.42	0.01
800	4.03	0.01	34.307	0.001	27.25	89.7	1.133	0.35	0.01
1000	3.56	0.01	34.405	0.000	27.38	78.7	1.301	0.35	0.00
1200	3.13	0.00	34.468	0.006	27.47	70.5	1.450	0.43	0.00
1500	2.57	0.00	34.530	0.003	27.57	61.2	1.648	0.70	0.00

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STATION 275-055A OBSERVED VALUES

DATE 1/25/61 HR 15 LAT 47-17N LONG 126-10W SDG 2195 WEA 02
 SECD 16 BA 19 CL 6 AMT 3 DRY 8.2 WET 7.4 RELHU 90 VIS 6
 WVLE 5 DIR 09 SEA 2 DIR 09 SWL 2 DIR WA

DEPTH	CHL-A	PROD-I	PROD-S
0	0.30	1.77	9.76
6	0.53	1.26	5.66
22	0.50	1.34	0.66
43	0.29	0.74	0.08

A A A A

STATION 275-056 OBSERVED VALUES

DATE 1/26/61 HR 01 LAT 47-34N LONG 126-02W SDG 1097 WEA 01
 SECDI 17 BA 19 CL 6 AMT 2 DRY 9.2 WET 7.8 RELHU 83 VIS 7
 WVEL 4 DIR 07 SEA 2 DIR 07 SWL 1 DIR 27 WA 20, 12

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	9.70	32.484	25.06	6.42				0.21	1.29	
	A	7								0.35	1.25	
	2	10	9.70	32.482	25.06	6.43						
A	2	20	9.71	32.484	25.06	6.45						
	2	23	9.64	32.496	25.08	6.43				0.25	1.22	
	2	29	9.56	32.519	25.11	6.33						
A		38										
		46								0.22	0.48	
	2	57	9.48	32.520	25.12	6.35						
	2	76	9.30	32.544	25.17	6.24						
	2	96	8.36	33.311	25.92	4.46						
	2	119	8.12	33.600	26.18	3.76						
	2	138	7.80	33.738	26.33	3.35						
	2	167	7.56	33.828	26.44	2.94						
	1	188	7.46	33.869	26.49	2.78						
	1	281	6.59	34.010	26.72	1.97						
	1	472	5.26	34.103	26.96	0.97						
	1	711	4.21	34.290	27.22	0.37						
	1	997	3.57	34.404	27.38	0.39						

STATION 275-056 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.70		32.484		25.06	290.9	0.000	6.42	
10	9.70		32.482		25.06	291.2	0.030	6.43	
20	9.71		32.484		25.06	291.4	0.059	6.45	
30	9.63	0.00	32.499	0.000	25.08	289.3	0.088	6.42	0.00
50	9.51	0.01	32.522	0.003	25.12	286.0	0.145	6.33	0.02
75	9.32	0.00	32.534	0.006	25.16	282.7	0.216	6.27	0.01
100	8.29	0.03	33.389	0.012	25.99	204.4	0.277	4.28	0.03
150	7.68	0.01	33.786	0.004	26.39	167.0	0.370	3.15	0.00
200	7.27	0.01	33.890	0.006	26.54	153.8	0.450	2.59	0.03
250	6.85	0.01	33.979	0.006	26.66	142.9	0.524	2.17	0.02
300	6.43	0.00	34.024	0.005	26.75	134.8	0.594	1.84	0.01
400	5.70	0.01	34.081	0.012	26.89	122.5	0.723	1.27	0.02
500	5.11	0.00	34.125	0.003	26.99	113.0	0.840	0.87	0.00
600	4.63	0.01	34.203	0.007	27.11	102.5	0.948	0.57	0.01
700	4.25	0.00	34.281	0.001	27.21	93.2	1.046	0.38	0.00
800	3.94	---	34.338	---	27.29	86.3	1.136	0.29	---

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STATION 275-058 OBSERVED VALUES													
DATE	1/26/61	HR	08	LAT	47-43N	LONG	125-33W	SDG	988	WEA	02		
SECDI	BA	18	CL	6	AMT	4	DRY	8.9	WET	7.8	RELHU	87	VIS
WVEL	4	DIR	09	SEA	2	DIR	09	SWL	2	DIR	25	WA	12
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	9.45	32.405	25.04	6.46	1.01	16	6.4	0.39	0.70		
A	2	7								0.26	0.76		
	2	10	9.46	32.408	25.04	6.46	1.02	15	6.6				
A	2	20	9.46	32.403	25.04	6.45	1.00	17	6.7	0.26	0.65		
	2	23											
	2	29	9.50	32.422	25.04	6.40	1.05	9	4.9				
	2	38	9.54	32.427	25.04	6.36	1.00	17	6.4				
A	2	46								0.29	0.58		
	2	58	9.60	32.446	25.05	6.34	1.00	15	6.6				
	2	76	8.74	33.280	25.83	4.66	1.80	26	6.6				
	2	96	8.38	33.497	26.06	4.08	1.63	21	6.7				
	2	119	8.04	33.679	26.25	3.55	1.98	32	19.2				
	2	143	7.72	33.856	26.44	3.04	1.95	35	14.6				
	2	167	7.51	33.890	26.50	2.41	2.41	48	13.0				
1	192	7.43	33.904	26.52	2.78	2.34	2.34	44	36.3				
	1	290	6.46	33.989	26.72	2.02	2.27	44	40.7				
1	485	5.24	34.099	26.96	1.23	2.74	2.74	66	48.2				
1	727	4.24	34.277	27.21	0.66	3.31	111	64.6					
1	923	3.72	34.372	27.34	0.40	2.79	96	47.8					

STATION 275-058 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.45		32.405		25.04	292.9	0.000	6.46	
10	9.46		32.408		25.04	293.0	0.030	6.46	
20	9.46		32.403		25.04	293.6	0.059	6.45	
30	9.50	0.00	32.423	0.000	25.04	293.0	0.088	6.39	0.00
50	9.64	0.04	32.380	0.038	24.99	298.6	0.148	6.46	0.08
75	8.79	0.01	33.231	0.012	25.79	223.0	0.213	4.76	0.02
100	8.32	0.00	33.532	0.001	26.10	194.2	0.265	3.98	0.00
150	7.65	0.00	33.874	0.004	26.46	160.0	0.354	2.97	0.02
200	7.28	0.04	33.920	0.006	26.55	152.4	0.432	2.72	0.01
250	6.81	0.01	33.964	0.005	26.65	143.5	0.506	2.33	0.02
300	6.38	0.00	33.995	0.001	26.73	136.2	0.576	1.96	0.01
400	5.69	0.02	34.054	0.004	26.87	124.3	0.706	1.50	0.03
500	5.16	0.00	34.110	0.001	26.97	114.8	0.825	1.18	0.00
600	4.70	0.01	34.185	0.005	27.08	104.8	0.935	0.91	0.01
700	4.33	0.00	34.258	0.002	27.18	95.9	1.036	0.71	0.00
800	4.02	---	34.318	---	27.26	88.8	1.128	0.54	---

M M M

STATION 275-059 OBSERVED VALUES													
DATE	1/26/61	HR	13	LAT	47-39N	LONG	125-20W	SDG	914	WEA	02		
SECDI	BA	17	CL	AMT	DRY	8.9	WET	7.8	RELHU	87	VIS		
WVEL	4	DIR	05	SEA	2	DIR	05	SWL	1	DIR	25	WA	17.03
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P A	0	9.62	32.448	25.05	6.41				0.25	1.54			
	10	9.60	32.450	25.05	6.41				0.43	0.79			
A	20	9.60	32.456	25.06	6.40								
	23	9.58	32.455	25.06	6.41				0.24	0.83			
	29	9.59	32.456	25.06	6.40								
A	46								0.27	0.85			
	59	9.54	32.456	25.06	6.41								
	78	9.43	32.480	25.10	6.28								
	103	8.56	33.296	25.87	4.64								
2 2 2 1	123	8.16	33.594	26.17	3.89								
	148	8.00			3.22								
	172	7.74	33.873	26.45	2.80								
	188	7.44	33.909	26.52	2.58								
1 1 1	283	6.70	33.997	26.69	2.14								
	476	5.34	34.082	26.93	1.09								
	720	4.38	34.256	27.18	0.45								

STATION 275-059 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.62		32.448		25.05	292.3	0.000	6.41	
10	9.60		32.440		25.05	292.0	0.030	6.41	
20	9.60		32.456		25.06	291.8	0.059	6.40	
30	9.58	0.00	32.455	0.000	25.06	291.7	0.088	6.41	0.00
50	9.57	0.00	32.455	0.001	25.06	292.0	0.146	6.41	0.01
75	9.47	0.01	32.458	0.011	25.08	290.5	0.219	6.34	0.02
100	8.68	0.02	33.188	0.024	25.77	225.0	0.284	4.86	0.04
150	7.98	0.00	33.803	0.016	26.36	170.1	0.382	3.18	0.00
200	7.40	0.04	33.927	0.003	26.54	153.5	0.463	2.48	0.03
250	6.97	0.01	33.980	0.007	26.64	144.4	0.538	2.21	0.06
300	6.57	0.00	34.007	0.003	26.72	137.8	0.608	2.04	0.01
400	5.83	0.01	34.083	0.027	26.87	123.9	0.739	1.49	0.03
500	5.21	---	34.096	---	26.96	116.4	0.859	0.99	---
600	4.75	---	34.161	---	27.06	107.1	0.971	0.67	---
700	4.43	---	34.239	---	27.16	98.5	1.074	0.47	---

M M M

STATION 275-059D OBSERVED VALUES

DATE 1/26/61 HR 13 LAT 47-39N LONG 125-20W SDG RELHU WEA 00
 SEC DI 17 BA 17 CL AMT DRY SWL DIR DIR WET VIS
 WVEL 4 DIR 05 SEA DIR SWL DIR WA

DEPTH

0

CHL-A PROD-I PROD-S
 0.25 0.93 7.12

A

STATION 275-060				OBSERVED VALUES							
DATE SECD WVEL	1/26/61 17 DIR	HR 16 CL SEA 1	LAT 47-31N AMT 0 DIR	LONG 125-02W DRY 9.6 SWL 1	WET 9.3 DIR	SDG 400 RELHU 96 WA 03.04	WEA 02 VIS 9				
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	9.94	32.556	25.08	6.35				0.57	1.70	
	3	9.88	32.558	25.09	6.41						
	6	9.94	32.558	25.08	6.38						
A	7	9.94	32.556	25.08	6.36				0.33	1.72	
	10	9.95	32.558	25.08	6.36						
	20	9.98	32.565	25.08	6.36						
A	23	9.96	32.571	25.09	6.35				0.42	1.19	
	24	9.91	32.569	25.09	6.35						
	39	9.91	32.569	25.09	6.35						
A	43	9.94	32.576	25.09	6.31				0.28	1.41	
	59	9.54	32.951	25.45							
	78	8.94	33.325	25.84	4.60						
	98										
	122	8.62	33.612	26.11	3.75						
	146	8.10	33.759	26.31	3.14						
	170	7.87	33.820	26.39	2.93						
	196	7.63	33.871	26.46	2.78						
	292	6.82	33.992	26.67	2.18						
	341	6.19	34.017	26.77	1.86						

STATION 275-060 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.94		32.556		25.08	289.3	0.000	6.35	
10	9.94		32.556		25.08	289.5	0.029	6.36	
20	9.98		32.565		25.08	289.6	0.058	6.36	
30	9.91	0.00	32.569	0.000	25.09	288.4	0.087	6.35	0.00
50	9.95	0.02	32.548	0.016	25.07	291.1	0.145	6.37	0.02
75	9.62	0.01	32.880	0.008	25.38	261.7	0.214	5.71	0.10
100	8.91	0.01	33.355	0.000	25.87	216.0	0.274	4.52	0.00
150	8.05	0.01	33.773	0.002	26.32	173.3	0.371	3.16	0.02
200	7.60	0.00	33.878	0.000	26.47	159.9	0.455	2.76	0.00
250	7.20	0.03	33.951	0.000	26.59	149.7	0.532	2.45	0.00
300	6.73	---	33.998	---	26.69	140.6	0.605	2.13	---

M

STATION 275-061 OBSERVED VALUES

DATE 1/26/61 HR 19 LAT 47-24N LONG 124-42W SDG 110 WEA 02
 SECDI 16 BA 18 CL AMT 0 DRY 8.8 WET 7.7 RELHU 87 VIS 9
 WVEL 3 DIR 06 SEA 1 DIR 06 SWL 1 DIR 35 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	1	10.24	32.601	25.06	6.29	1.27	17	6.7	0.35	1.18	6.00
		10.24	32.599	25.06	6.29						
C	1	10.24	32.602	25.06	6.29	1.10	11	7.0	0.24	1.12	2.84
		10.19	32.604	25.07	6.29						
		10.21	32.597	25.06	6.28						
A	1	10.21	32.597	25.06	6.26	1.01	12	6.0	0.21	0.95	0.66
		10.20	32.595	25.06	6.34						
		10.23	32.597	25.06	6.29						
A	1	10.17	32.596	25.07	6.26	1.01	17	6.4	0.70	1.19	0.02
		10.17	32.601	25.07	6.23						
		10.28	32.625	25.07	6.19						
		10.19	32.666	25.12	6.09						

STATION 275-061 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.24		32.601		25.06	290.7	0.000	6.29	
10	10.19		32.604		25.07	289.9	0.030	6.29	
20	10.21		32.597		25.06	291.0	0.059	6.26	
30	10.23	0.00	32.597	0.000	25.06	291.4	0.088	6.28	0.00
50	10.15	0.00	32.597	0.000	25.07	290.6	0.146	6.24	0.00
75	10.27	0.01	32.620	0.000	25.07	291.2	0.219	6.20	0.00

STATION 275-062 OBSERVED VALUES

DATE	1/26/61	HR	22	LAT	47-42N	LONG	124-37W	SDG	40	WEA	
SECDI	4	BA	18	CL	AMT	DRY	WET	RELHU		VIS	
WVEL	DIR	SEA	1	DIR	33	WA	00				
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.42	28.680	22.14	6.75	1.13	31	5.4	0.20	1.88	
A	2								0.73	3.15	
	3	9.61	30.047	23.18	6.61	1.10	29	7.1			
A	5									3.47	
	6	9.56	30.336	23.41	6.56	1.07	25	7.2			
A	10	9.80	30.712	23.67	6.44	1.10	20	4.6	1.32	2.39	
	11										
	15	9.82	31.206	24.05	6.50	1.04	18	4.4			
	20	9.91	31.414	24.19	6.41	1.06	20	7.0			
	25	10.18	31.686	24.36	6.27	1.07	17	7.2			
	30	10.26	32.058	24.64	6.19	1.02	19	7.0			

STATION 275-062 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.42		28.670		22.14	569.3	0.000	6.75	
10	9.80		30.712		23.67	424.1	0.050	6.44	
20	9.91		31.414		24.19	373.8	0.090	6.41	
30	10.26		32.058		24.64	331.8	0.125	6.19	

STATION 275-063 OBSERVED VALUES

DATE	1/27/61	HR	00	LAT	47-49N	LONG	124-49W	SDG	68	WEA	02
SECD	1	BA	17	CL	AMT	0	DRY	WET	RELHU	VIS	9
WVEL	3	DIR	03	SEA	1	DIR	03	SWL	1	DIR	33
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	0	9.71	31.012	23.91	6.56				0.33	3.15	
	3	9.93	31.487	24.25	6.51				0.44	2.84	
A	6	10.16	31.847	24.49	6.40						
	10	10.31	32.323	24.83	6.40						
	11										
A	15	10.27	32.352	24.86	6.36				0.55	1.39	
	20	10.20	32.358	24.88	6.33						
A	22										
	24	10.33	32.436	24.92	6.30				0.35	1.78	
	29	10.34	32.474	24.95	6.29						
A	39	10.34	32.500	24.97	6.28						
	64	10.38	32.524	24.98	6.22						

STATION 275-063 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.71		31.012		23.91	400.2	0.000	6.56	
10	10.31		32.323		24.83	312.6	0.036	6.40	
20	10.20		32.358		24.88	308.5	0.067	6.33	
30	10.34	0.00	32.478	0.001	24.95	302.0	0.098	6.29	0.00
50	10.35	---	32.518	---	24.98	299.7	0.158	6.26	---

STATION 275-064 OBSERVED VALUES													
DATE	1/27/61	HR	03	LAT	47-58N	LONG	125-03W	SDG	128	WEA			
SECDI	BA 16	CL	1	AMT	1	DRY	10.3	WET	6.4	RELHU	67	VIS	9
WVEL	3	DIR	04	SEA	1	DIR	04	SWL	1	DIR	33	WA	07
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	9.98	32.505	25.03	6.41				0.36	1.40			
	3		32.500		6.42				0.45	1.32			
	6	9.98	32.504	25.03	6.42								
	10	9.98	32.505	25.03	6.41								
A	11								0.50	1.56			
	15	9.98	32.504	25.03	6.41								
	20	9.97	32.505	25.03	6.38				0.54	1.36			
A	22												
	24	9.94	32.508	25.04	6.38								
	29	9.96	32.506	25.04	6.38								
	38	9.94	32.535	25.05	6.38								
	58	9.98	32.670	25.15	6.35								
	76	10.01	33.223	25.68	4.88								
	96	9.45											
	114	8.54	33.584	26.10	3.63								

STATION 275-064 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.98		32.505		25.03	293.7	0.000	6.41	
10	9.98		32.505		25.03	293.9	0.030	6.41	
20	9.97		32.505		25.03	293.9	0.059	6.38	
30	9.96	0.00	32.504	0.001	25.03	294.0	0.089	6.38	0.00
50	9.96	0.00	32.512	0.005	25.04	293.8	0.147	6.39	0.01
75	10.02	0.00	32.657	0.002	25.14	284.5	0.220	6.05	0.00
100	9.28	---	33.314	---	25.78	224.7	0.283	4.62	---

STATION 275-065 OBSERVED VALUES													
DATE 1/27/61	HR 05	LAT 48-08N	LONG 125-14W	SDG 248	WEA 02								
SECD1 BA 17	CL	AMT 0	DRY 10.6	WET 6.0	RELHU 50	VIS 7							
WVEL 11	DIR 09	SEA 2	DIR 09	SWL 2	DIR 34	WA 26.14							
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	10.00	32.507	25.03	6.38	0.98	8	5.8	0.77	0.98			
	3	10.00	32.509	25.03	6.35	0.96	8	6.1					
P	6	10.00	32.506	25.03	6.36	0.73	8	5.1	0.81	1.18			
	10	9.99	32.507	25.03	6.37	0.78	8	5.1					
	15	10.00	32.514	25.03	6.35	0.74	8	5.6					
A	19	10.00	32.503	25.03	6.37	0.58	10	5.4	0.55	1.07			
	22	10.00	32.501	25.02	6.36	0.79	6	5.1					
	28	10.02	32.514	25.03	6.33	0.91	8	5.6					
A	37	10.00	32.505	25.03	6.33	0.89	9	5.4	0.23	1.11			
	43	10.02	32.514	25.03	6.27	1.14	9	5.7					
	75	9.75	32.507	25.07	5.31	1.21	16	10.1					
	94	8.91	33.288	25.81	4.23	1.62	28	16.0					
	118	8.40	33.564	26.11	3.81	2.02	32	21.1					
	142	8.36	33.588	26.13	3.70	2.06	36	21.6					
	166	8.06	33.758	26.31	3.25	2.23	40	23.4					
	190	7.92	33.799	26.36	3.24	2.19	40	24.6					
	228	7.28	33.897	26.53	2.53	2.39	50	25.0					

STATION 275-065 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.00		32.507		25.03	293.9	0.000	6.38	
10	9.99		32.507		25.03	293.9	0.030	6.37	
20	10.00	0.00	32.501	0.000	25.02	294.7	0.059	6.37	0.00
30	10.02	0.00	32.514	0.002	25.03	294.2	0.089	6.33	0.00
50	10.03	0.02	32.500	0.002	25.03	295.1	0.148	6.36	0.04
75	9.75		32.507		25.07	291.3	0.221	5.31	
100	8.73	0.00	33.406	0.017	25.93	209.6	0.284	4.06	0.02
150	8.27	0.02	33.644	0.010	26.19	186.0	0.383	3.54	0.03
200	7.80	---	33.821	---	26.40	167.0	0.471	3.14	---

M

STATION 275-066 OBSERVED VALUES													
DATE	1/27/61	HR	08	LAT	48-17N	LONG	125-03W	SDG	192	WEA	02		
SECDI	BA	18	CL	AMT	0	DRY	9.4	WET	6.2	RELHU	62	VIS	7
WVEL	8	DIR	06	SEA	2	DIR	06	SWL	3	DIR	35	WA	12, 08
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	0	9.88	32.515	25.06	6.38				0.51	0.75			
	3	9.86	32.515	25.06	6.37								
P	6	9.90	32.517	25.05	6.37				0.52	0.80			
	10	9.90	32.520	25.06	6.36								
	15	9.88	32.520	25.06	6.37								
A	20	9.90	32.522	25.06	6.37				0.73	0.83			
	22												
	24	9.90	32.522	25.06	6.35								
A	29	9.90	32.523	25.06	6.35				0.39	0.93			
	39	9.91	32.529	25.06	6.33								
	43												
	58	9.94	32.531	25.06	6.28								
	77	9.70	32.967	25.44	5.31								
	96	8.92	33.307	25.83	4.28								
	119		33.534		3.77								
	144		33.651		3.39								
	167		33.833		2.86								

STATION 275-066 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	9.88		32.515		25.06	291.4	0.000	6.38					
10	9.90		32.510		25.06	291.5	0.030	6.36					
20	9.90		32.522		25.06	291.6	0.059	6.37					
30	9.90	0.00	32.524	0.000	25.06	291.7	0.088	6.35	0.00				
50	9.94	0.01	32.504	0.018	25.04	294.1	0.147	6.36	0.04				
75	9.74	0.00	32.913	0.008	25.39	261.2	0.216	5.44	0.01				
100		---	33.358	---				4.18					
150		---	33.680	---				3.27					

M

STATION 275-067 OBSERVED VALUES													
DATE	1/27/61	HR	12	LAT	48-27N	LONG	124-47W	SDG	220	WEA	02		
SECD1	BA	19	CL	AMT	0	DRY	WET	RELHU		VIS			
WVEL	10	DIR	09	SEA	2	DIR	09	SWL	2	DIR	09	WA	40.05
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	8.24	31.481	24.50	5.64	1.98							
	3	8.22	31.489	24.51	5.66	1.91			0.27	0.61			
P	6	8.19	31.463	24.50	5.66	1.96				0.55			
	10	8.22	31.456	24.49	5.64	2.04							
	15	8.24	31.513	24.53	5.61	1.98							
A	20	8.26	31.529	24.54	5.61	2.43							
	22								0.16	0.39			
	24	8.31	31.599	24.58	5.54	2.03							
	29	8.38	31.650	24.61	5.51	1.93							
A	39	9.22	32.087	24.83	5.69	1.45							
	43								0.40	0.35			
	59	9.86	32.347	24.93	5.91	1.32							
	77	10.22	32.529	25.01	6.13	1.04							
	96	10.09	32.636	25.12	6.02	1.09							
	99	10.22	32.551	25.10	5.87	1.10							
	116	9.90	32.837	25.30	5.48	1.43							
	136	9.76	32.932	25.40	5.24	1.57							
	156	9.03	33.336	25.83	4.36	2.06							

STATION 275-067 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	8.24		31.481		24.50	344.0	0.000	5.64	
10	8.22		31.456		24.49	345.7	0.035	5.64	
20	8.26		31.529		24.54	341.0	0.069	5.61	
30	8.45	0.02	31.688	0.010	24.63	332.0	0.103	5.52	0.01
50	9.67	0.05	32.284	0.031	24.91	306.2	0.167	5.82	0.01
75	10.20	0.00	32.512	0.000	25.00	298.1	0.242	6.11	0.01
100	10.13	0.05	32.621	0.032	25.10	289.4	0.316	5.89	0.03
150	9.31	---	33.182	---	25.67	235.9	0.447	4.69	---

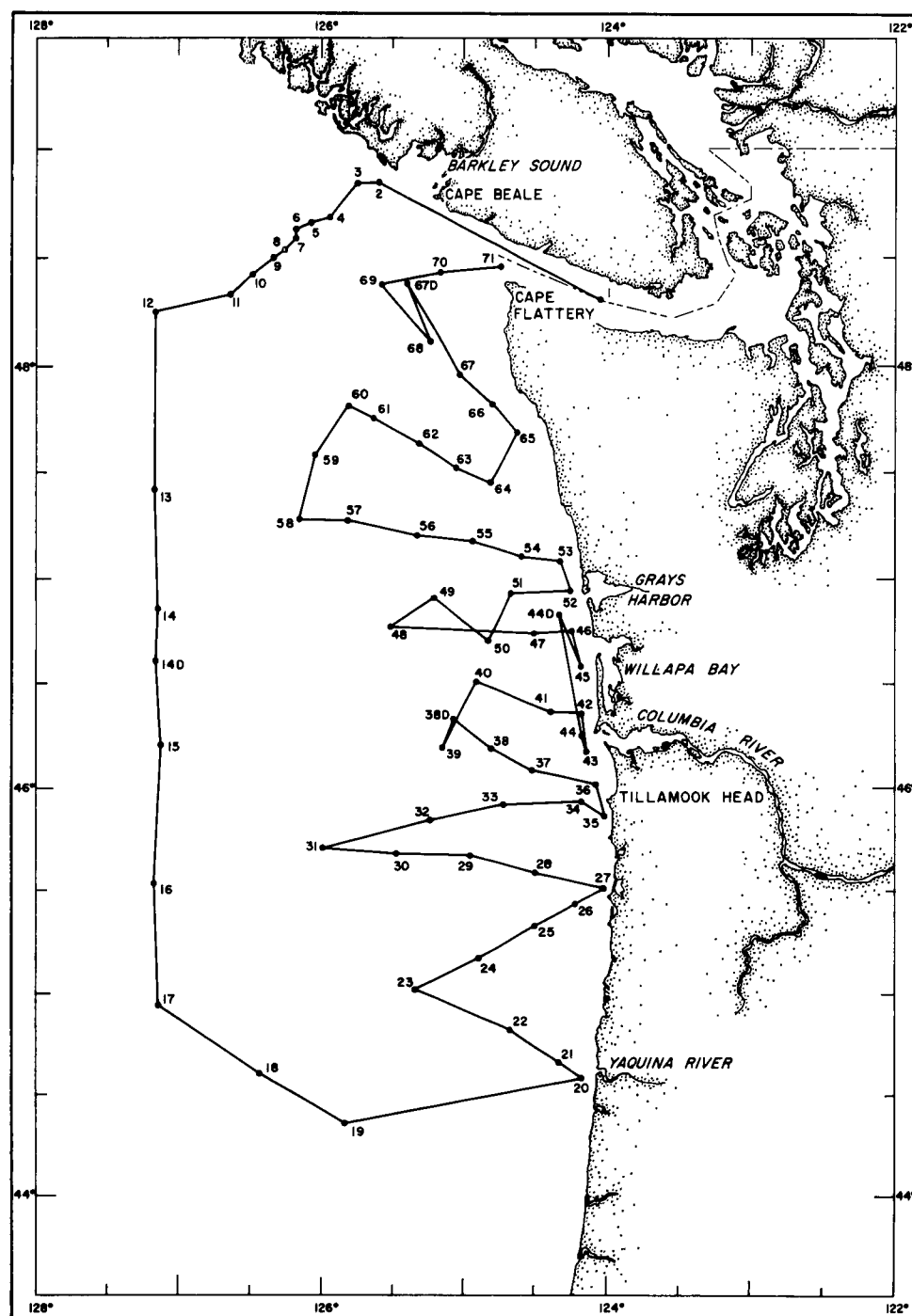


Fig. 3. Station locations Brown Bear Cruise No. 280, 7-24 March, 1961.

STATION 280-001 OBSERVED VALUES													
DATE	3/08/61	HR	04	LAT	48-18N	LONG	124-03W	SDG	188	WEA	02		
SECDI	BA 15	CL	X	AMT	9	DRY	8.3	WET	7.7	RELHU	93	VIS	7
WVEL	5	DIR	06	SEA	0	DIR	00	SWL	0	DIR	00	WA	11
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	7.98	30.285	23.60	6.09				0.67	1.40			
A	3	7.96	30.280	23.60	6.21								
	4								0.31	1.45			
	6	7.97	30.283	23.60	6.14								
	9	7.97	30.284	23.61	6.15								
A	14	7.98	30.288	23.61	5.99								
	15								0.31	1.51			
	19	8.08	30.403	23.68	5.96								
	24	8.10	30.433	23.70	5.92								
	29	8.10	30.547	23.79	5.85				0.20	0.70			
A	30												
	39	8.23	30.814	23.98	5.69								
	58	8.40	31.263	24.31	5.46								
	77	8.57	31.769	24.68	5.23								
	97	8.92	32.590	25.27	4.98								
	121	8.47	33.455	26.01	3.82								
	146	8.02	33.607	26.20	3.36								
	170	7.77	33.706	26.31	3.11								

STATION 280-001 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	7.98		30.285		23.60	429.7	0.000	6.09					
10	7.97	0.00	30.280	0.003	23.60	430.0	0.043	6.12	0.01				
20	8.09	0.00	30.409	0.005	23.69	422.1	0.086	5.95	0.00				
30	8.11	0.00	30.573	0.001	23.81	410.3	0.128	5.83	0.00				
50	8.33	0.00	31.075	0.005	24.17	376.2	0.207	5.55	0.00				
75	8.55	0.00	31.708	0.003	24.64	332.5	0.295	5.25	0.00				
100	8.89	0.02	32.721	0.010	25.37	262.7	0.369	4.84	0.03				
150	7.97	---	33.627	---	26.22	182.9	0.483	3.31	---				

STATION 280-002 OBSERVED VALUES

DATE 3/08/61 HR 14 LAT 48-52N LONG 125-35W SDG 42 WEA 61
 SECD1 BA 05 CL AMT 9 DRY WET VIS 5
 WVEL 22 DIR 15 SEA 3 DIR 15 SWL 4 DIR 27 WA 10

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	8.18	29.676	23.10	6.35						
1	3	8.16	29.674	23.10	6.34						
1	6	8.19	29.674	23.10	6.33						
1	10	8.17	29.676	23.10	6.35						
1	15	8.17	29.684	23.11							
1	20	8.16	29.694	23.12	6.33						
1	25	8.16	29.701	23.12	6.28						
1	30	8.16	29.733	23.15	6.28						

STATION 280-002 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.18		29.676		23.10	477.8	0.000	6.35	
10	8.17		29.676		23.10	477.8	0.048	6.35	
20	8.16		29.694		23.12	476.4	0.096	6.33	
30	8.16		29.733		23.15	473.6	0.143	6.28	

STATION 280-003														OBSERVED VALUES				
DATE	3/08/61	HR	18	LAT	48-51N	LONG	125-44W	SDG	58	WEA	02							
SECDI	BA	08	CL	6	AMT	8	DRY	8.3	WET	6.9	RELHU	79	VIS	7				
WVEL	4	DIR	14	SEA	2	DIR	14	SWL	4	DIR	WA	05						
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S							
1	0	8.84	31.374	24.33	6.17													
1	3	8.83	31.373	24.33	6.26													
1	6	8.84	31.366	24.32	6.24													
1	10	8.88	31.409	24.35	6.23													
1	15	9.00	31.562	24.45	6.23													
1	20	9.04	31.588	24.47	6.19													
1	25	9.06	31.598	24.47	6.19													
1	30	9.06	31.596	24.47	6.19													
1	40	9.05	31.608	24.48	6.19													
1	50	9.05	31.611	24.48	6.18													

STATION 280-003 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.84		31.374		24.33	360.4	0.000	6.17	
10	8.88		31.409		24.35	358.6	0.036	6.23	
20	9.04		31.588		24.47	347.8	0.072	6.19	
30	9.06		31.596		24.47	347.6	0.107	6.19	
50	9.05		31.611		24.48	346.7	0.176	6.18	

STATION 280-004 OBSERVED VALUES

DATE 3/08/61 HR 20 LAT 48-42N LONG 125-57W SDG 79 WEA 02
 SECD1 BA 09 CL 6 AMT 8 DRY 8.8 WET 7.6 RELHU 86 VIS 7
 WVEL 11 DIR 18 SEA 2 DIR 18 SWL 4 DIR WA 06

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.50	32.383	25.01	6.38						
1	3	9.52	32.391	25.02	6.38						
1	6	9.51	32.380	25.01	6.35						
1	10	9.50	32.373	25.01	6.36						
1	15	9.52	32.380	25.01	6.35						
1	20	9.52	32.393	25.02	6.36						
1	25	9.52	32.422	25.04	6.34						
1	30	9.55	32.447	25.06	6.34						
1	40	9.52	32.470	25.08	6.34						
1	60	9.40	32.513	25.13	6.38						
1	75	9.35	32.506	25.13	6.38						

STATION 280-004 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.50		32.383		25.01	295.3	0.000	6.38	
10	9.50		32.373		25.01	296.2	0.030	6.36	
20	9.52		32.393		25.02	295.2	0.060	6.36	
30	9.55		32.447		25.06	291.9	0.089	6.34	
50	9.46	0.01	32.495	0.002	25.11	287.3	0.147	6.36	0.00
75	9.35		32.506		25.13	285.2	0.218	6.38	

STATION 280-005														OBSERVED VALUES													
DATE	3/08/61	HR	22	LAT	48-40N	LONG	126-04W	SDG	113	WEA	01																
SECDI	BA	10	CL	6	AMT	6	DRY	8.8	WET	7.3	RELHU	79	VIS	7													
WVEL	9	DIR	21	SEA	2	DIR	21	SWL	4	DIR	WA	10															
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S																
P	1	9.37	32.537	25.16	6.41				0.43	0.86																	
	3	9.36	32.540	25.16	6.32																						
	6	9.36	32.538	25.16	6.34																						
A	7								0.30	1.28																	
	10	9.36	32.541	25.16	6.29																						
	15	9.37	32.538	25.16	6.02																						
	20	9.36	32.537	25.16	6.08																						
A	24								0.13	0.89																	
	25	9.38	32.545	25.16	6.18																						
	30	9.37	32.548	25.16	6.29																						
	39	9.32	32.543	25.17	6.28																						
A	49								0.47	0.70																	
	59	9.24	32.534	25.17	6.34																						
	79	9.30	32.572	25.19	6.20																						
	98	9.05	33.214	25.73	4.41																						

STATION 280-005 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.37		32.537		25.16	281.9	0.000	6.41	
10	9.36		32.541		25.16	281.6	0.029	6.29	
20	9.36		32.537		25.16	282.1	0.057	6.08	
30	9.37		32.548		25.16	281.6	0.085	6.29	
50	9.26	0.00	32.535	0.002	25.17	281.3	0.141	6.32	0.01
75	9.30	0.01	32.536	0.016	25.17	282.1	0.212	6.31	0.04

STATION 280-006 OBSERVED VALUES

DATE 3/09/61 HR 00 LAT 48-38N LONG 126-10W SDG 133 WEA 01
 SECD1 BA 10 CL 6 AMT 5 DRY 10.3 WET 8.7 RELHU 87 VIS 7
 WVEL 9 DIR 21 SEA 2 DIR 21 SWL 4 DIR WA 08.15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.26	32.543	25.18	6.31						
1	3	9.29	32.543	25.17	6.31						
1	6	9.31	32.547	25.17	6.29						
1	10	9.30	32.545	25.17	6.31						
1	15	9.22	32.542	25.18	6.31						
1	20	9.18	32.532	25.18	6.34						
1	25	9.15	32.530	25.18	6.34						
1	30	9.14	32.529	25.19	6.35						
1	40	9.08	32.523	25.19	6.34						
1	60	8.99	32.522	25.20	6.29						
2	77	9.16	32.573	25.22	6.19						
2	99	9.46	32.769	25.32	5.63						
2	123	9.01	33.325	25.83	3.56						

STATION 280-006 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.26		32.543		25.18	279.8	0.000	6.31	
10	9.30		32.545		25.17	280.4	0.029	6.31	
20	9.18		32.532		25.18	279.7	0.057	6.34	
30	9.14		32.529		25.19	279.5	0.084	6.35	
M	9.01	0.01	32.517	0.002	25.20	278.8	0.140	6.32	0.00
M	9.13	0.00	32.563	0.001	25.21	277.7	0.210	6.21	0.00
100	9.46	---	32.785	---	25.33	266.6	0.278	5.57	---

STATION 280-007 OBSERVED VALUES

DATE 3/09/61 HR 02 LAT 48-35N LONG 126-10W SDG 214 WEA 03
 SECD1 BA 11 CL 6 AMT 6 DRY WET RELHU VIS 7
 WVEL 10 DIR 21 SEA 2 DIR 21 SWL 4 DIR 23 WA 28, --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	9.54	32.550	25.14	6.26						
2	3	9.55	32.555	25.14	6.23						
2	6	9.52	32.548	25.14	6.24						
2	10	9.52	32.552	25.14	6.20						
2	15	9.52	32.554	25.14	6.22						
2	19	9.54	32.550	25.14	6.22						
2	24	9.52	32.552	25.14	6.20						
2	29	9.47	32.563	25.16	6.20						
2	38	9.39	32.550	25.16	6.15						
2	57	9.69	32.723	25.25	5.63						
2	86	9.65	32.801	25.32	5.51						
2	100	9.50	33.062	25.54	4.84						
1	119	8.76	33.399	25.92	4.11						
1	144	8.00	33.677	26.26	3.28						
1	168	7.88	33.719	26.31	3.12						
1	193	7.21	33.870	26.52	2.54						

STATION 280-007 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.54		32.540		25.14	283.5	0.000	6.26	
10	9.52		32.552		25.14	283.3	0.029	6.20	
20	9.54	0.00	32.540	0.000	25.14	283.9	0.057	6.22	0.00
30	9.46	0.00	32.561	0.002	25.16	282.0	0.085	6.20	0.00
50	9.56	0.03	32.649	0.014	25.21	277.4	0.141	5.83	0.04
75	9.72	0.01	32.748	0.033	25.26	273.1	0.210	5.61	0.10
100	9.50		33.062		25.54	246.8	0.275	4.84	
150	7.97	0.03	33.693	0.010	26.27	178.0	0.381	3.23	0.03

STATION 280-008 OBSERVED VALUES

DATE 3/09/61 HR 04 LAT 48-32N LONG 126-15W SDG 487 WEA 03
 SECD1 BA 10 CL 6 AMT 6 DRY 7.0 WET 5.1 RELHU 71 VIS 7
 WVEL 12 DIR 18 SEA 2 DIR 18 SWL 4 DIR 23 WA 25.15

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	8.84	32.482	25.20	6.44						
2	9	8.85	32.482	25.19	6.38						
2	18	8.86	32.487	25.20	6.40						
2	28	8.85	32.487	25.20	6.38						
2	37	8.86	32.495	25.20	6.41						
2	56	8.86	32.494	25.20	6.38						
2	75	8.85	32.496	25.20	6.40						
2	95	8.84	33.173	25.74	5.03						
2	119	8.33	33.534	26.10	3.85						
2	149	7.92	33.707	26.29	3.28						
2	167	7.66	33.808	26.41	3.01						
1	180	7.69	33.811	26.41							
1	274	6.94	33.959	26.63	2.28						
1	361	5.76	34.008	26.82	1.57						

STATION 280-008 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.84	0.00	32.482	0.000	25.20	278.1	0.000	6.44	0.00
10	8.85	0.00	32.483	0.000	25.19	278.4	0.028	6.38	0.00
20	8.86	0.00	32.487	0.000	25.20	278.3	0.056	6.40	0.00
30	8.85	0.00	32.489	0.000	25.20	278.3	0.084	6.39	0.00
50	8.86	0.00	32.495	0.001	25.20	278.2	0.140	6.39	0.01
75	8.85	0.02	32.496	0.008	25.20	278.4	0.209	6.40	0.00
100	8.75	0.02	33.277	0.008	25.83	219.5	0.271	4.74	0.00
150	7.90	0.00	33.714	0.001	26.30	175.5	0.370	3.26	0.00
200	7.62	0.03	33.837	0.009	26.44	163.3	0.455	2.71	0.06
250	7.24	0.04	33.915	0.010	26.55	152.9	0.534	2.39	0.05
300	6.64	-.00	33.983	-.000	26.69	140.5	0.607	2.08	-.00

STATION 280-009 OBSERVED VALUES													
DATE	3/09/61	HR	06	LAT	48-29N	LONG	126-20W	SDG	1051	WEA	02		
SECD1	BA 10	CL	X	AMT	6	DRY	7.8	WET	5.6	RELHU	72	VIS	7
WVEL	8	DIR	16	SEA	2	DIR	16	SWL	4	DIR	WA	08	11
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
2	0	8.76	32.488	25.21	6.38								
2	10	8.73	32.491	25.22	6.41								
2	20	8.76	32.489	25.21	6.41								
2	30	8.76	32.492	25.22	6.41								
2	40	8.76	32.495	25.22	6.42								
2	59	8.78	32.493	25.21	6.41								
2	79	8.78	32.499	25.22	6.33								
2	99	8.45	33.257	25.86	4.44								
2	124	8.10	33.550	26.14	3.81								
2	149	7.84	33.741	26.33	3.17								
2	173	7.51	33.845	26.46	2.86								
1	187	7.50	33.856	26.47	2.71								
1	282	6.65	33.978	26.68	1.98								
1	523	5.04	34.116	26.99	0.81								

STATION 280-009 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	8.76		32.488		25.21	276.5	0.000	6.38					
10	8.73		32.491		25.22	276.0	0.028	6.41					
20	8.76		32.489		25.21	276.7	0.056	6.41					
30	8.76		32.492		25.22	276.7	0.083	6.41					
50	8.77	0.00	32.494	0.001	25.22	277.0	0.139	6.42	0.00				
75	8.79	0.01	32.467	0.020	25.19	279.7	0.208	6.42	0.05				
100	8.43	0.00	33.277	0.004	25.88	214.8	0.270	4.40	0.01				
150	7.82	0.00	33.747	0.000	26.34	172.0	0.367	3.15	0.00				
200	7.42	0.03	33.871	0.002	26.49	157.9	0.449	2.59	0.01				
250	7.01	0.06	33.934	0.004	26.60	148.3	0.526	2.19	0.01				
300	6.50	---	33.997	---	26.72	137.7	0.597	1.86	---				
400	5.76	---	34.076	---	26.87	123.6	0.728	1.28	---				
500	5.16	---	34.113	---	26.98	114.5	0.847	0.88	---				

STATION 280-010 OBSERVED VALUES

DATE 3/09/61 HR 08 LAT 48-25N LONG 126-30W SDG 1500 WEA 61
 SECDI BA 08 CL X AMT 9 DRY 7.3 WET 7.3 RELHU 99 VIS 6
 WVEL 12 DIR 12 SEA 2 DIR 12 SWL 4 DIR WA 25.15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	8.78	32.494	25.21	5.92						
2	10	8.78	32.496	25.22	6.24						
2	19	8.78	32.518	25.23	5.86						
2	29	8.78	32.498	25.22	5.67						
2	39	8.78	32.501	25.22	6.38						
2	58	8.78	32.504	25.22	6.27						
2	78	8.80	32.545	25.25	6.22						
2	98	8.42	33.542	26.09	3.61						
2	123	8.16	33.716	26.26	3.12						
2	147	7.88	33.806	26.38	2.66						
2	171	7.64	33.857	26.45	2.52						
1	187	7.58	33.866	26.47	2.45						
1	281	6.88	33.971	26.65	2.09						
1	468	5.43	34.079	26.92	1.08						
1	704	4.34	34.250	27.18	0.38						
1	992	3.64	34.354	27.33	0.35						

STATION 280-010 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	8.78		32.494		25.21	276.3	0.000	5.92	
10	8.78		32.496		25.22	276.3	0.028	5.24	
20	8.78		32.517	0.001	25.23	275.0	0.056	5.82	0.01
30	8.78	0.00	32.498	0.000	25.22	276.5	0.083	5.73	0.02
50	8.78	0.00	32.501	0.002	25.22	276.6	0.139	6.43	0.08
75	8.81	0.01	32.507	0.019	25.22	277.0	0.208	6.31	0.06
100	8.40	0.00	33.579	0.014	26.12	191.8	0.266	3.51	0.04
150	7.84	0.00	33.815	0.000	26.39	167.2	0.356	2.63	0.01
200	7.42	0.02	33.898	0.005	26.52	155.8	0.437	2.40	0.02
250	7.07	0.02	33.951	0.005	26.60	148.0	0.513	2.20	0.02
300	6.72	0.01	33.984	0.002	26.68	141.5	0.585	1.99	0.01
400	5.93	0.02	34.046	0.006	26.83	128.0	0.720	1.45	0.03
500	5.24	0.01	34.103	0.002	26.96	116.3	0.842	0.95	0.00
600	4.74	0.01	34.177	0.005	27.07	105.8	0.953	0.61	0.00
700	4.35	0.00	34.247	0.000	27.17	97.0	1.055	0.39	0.00
800	4.03	---	34.297	---	27.25	90.4	1.148	0.27	---

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STATION 280-011 OBSERVED VALUES

DATE 3/09/61 HR 15 LAT 48-19N LONG 126-40W SDG 2012 WEA 18
 SECD1 BA 07 CL 4 AMT 7 DRY WET RELHU VIS 9
 WVEL 10 DIR 20 SEA 2 DIR 20 SWL 1 DIR 18 WA 14.33.35

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	8.78	32.510	25.23	6.38				0.24	1.26	5.06
A	2	8.77	32.496	25.22	6.40					1.20	
	15	8.78	32.498	25.22	6.40						
	23	8.77	32.501	25.22	6.37						
A	24										
	30	8.78	32.494	25.21	6.36				0.28	0.99	
	46	8.82	32.543	25.25	6.26						
A	49										
	62	8.44	33.546	26.09	3.58				0.29	1.00	
	77	8.25	33.726	26.26	3.11						
	121	8.11	33.793	26.33	2.81						
4	146	7.98	33.843	26.39	2.61						
2	153	7.88	33.868	26.42	2.44						
4	171	7.72	33.880	26.46	2.44						
	227	7.14	33.930	26.58							
2	329	6.94	33.974	26.64	1.62						
3	497	5.38	34.075	26.92	0.95						
3	713	4.40	34.081	27.04	0.32						
3	1186	3.17	34.449	27.45	0.40						

STATION 280-011 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.78	0.00	32.500	0.000	25.23	275.1	0.000	6.38	0.00
10	8.77	0.00	32.496	0.000	25.22	276.2	0.028	6.40	0.00
20	8.77	0.00	32.501	0.000	25.22	276.1	0.056	6.38	0.00
30	8.78	0.00	32.494	0.000	25.21	276.8	0.083	6.36	0.00
50	8.74	0.02	32.788	0.056	25.45	254.6	0.136	5.61	0.15
75	8.27	0.00	33.726	0.013	26.25	178.7	0.191	3.11	0.03
100	8.15	0.03	33.802	0.030	26.33	171.6	0.234	2.86	0.07
150	7.93	0.01	33.857	0.005	26.41	165.3	0.319	2.52	0.04
200	7.41	0.02	33.906	0.002	26.52	155.1	0.399	2.34	0.04
250	7.07	0.05	33.942	0.002	26.60	148.6	0.475	2.11	0.07
300	6.97	0.06	33.964	0.003	26.63	146.4	0.548	1.82	0.04
400	6.33	0.09	34.010	0.005	26.76	135.1	0.689	1.31	0.00
500	5.36	0.00	34.075	0.001	26.92	119.8	0.817	0.94	0.00
600	4.82	0.04	34.080	0.010	26.99	114.0	0.934	0.61	0.01
700	4.44	0.01	34.081	0.002	27.03	110.3	1.046	0.35	0.00
800	4.08	---	34.112	---	27.09	104.7	1.153	0.18	---
1000	3.50	---	34.246	---	27.26	89.7	1.348	0.13	---

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STATION 280-012 OBSERVED VALUES													
DATE	3/09/61	HR	22	LAT	48-14N	LONG	127-09W	SDG	2561	WEA			
SECDI	BA	04	CL	AMT	DRY	4.4	WET	4.2	RELHU	92	VIS		
WVEL	9	DIR	12	SEA	DIR	SWL	DIR	WA	40.	44.	28		
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	4	8.75	32.526	25.24	6.41				0.19	0.98	4.82		
	4	8.74	32.529	25.25	6.38				0.38	0.84	2.70		
	18	8.75	32.531	25.25	6.41								
A	4	8.74	32.531	25.25	6.42								
	26	8.74	32.531	25.25	6.42								
	27	8.74	32.531	25.25	6.42								
	35	8.74	32.534	25.25	6.40				0.23	0.88	0.00		
	53	8.74	32.534	25.25	6.40								
A	4	8.74	32.534	25.25	6.40								
	54	8.74	32.545	25.26	6.38				0.46	0.96	0.00		
	70	8.16	33.386	26.01	4.29								
	87	8.16	33.386	26.01	4.29								
	110	8.06	33.561	26.16	3.74								
	131	7.81	33.768	26.36	3.19								
	149	7.72	33.787	26.38	3.12								
	227	6.96	33.950	26.62	2.37								
	3	5.68	34.048	26.86	1.31								
	384	4.82	34.146	27.04	0.67								
	550	4.06	34.297	27.24	0.30								
	774	2.99	34.453	27.47	0.53								
	1208	2.99	34.453	27.47	0.53								
	2	2.12	34.521	27.60	1.27								
	1727	2.12	34.521	27.60	1.27								

STATION 280-012 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.75	0.00	32.526	0.000	25.24	273.5	0.000	6.41	0.00
10	8.74	0.00	32.520	0.000	25.25	273.3	0.028	6.38	0.00
20	8.75	0.00	32.531	0.000	25.25	273.4	0.055	6.41	0.00
30	8.74	0.00	32.532	0.000	25.25	273.4	0.083	6.41	0.00
50	8.74	0.00	32.534	0.000	25.25	273.6	0.137	6.40	0.00
75	8.58	0.03	32.781	0.050	25.47	253.3	0.203	5.80	0.12
100	8.07	0.04	33.540	0.048	26.15	189.3	0.258	3.82	0.11
150	7.71	0.00	33.789	0.000	26.39	167.3	0.348	3.11	0.00
200	7.25	0.03	33.890	0.008	26.53	154.2	0.428	2.66	0.03
250	6.75	0.00	33.974	0.006	26.67	141.9	0.502	2.18	0.00
300	6.32	0.00	34.015	0.013	26.76	133.9	0.571	1.81	0.01
400	5.58	0.00	34.057	0.000	26.88	122.7	0.699	1.23	0.00
500	5.04	0.01	34.116	0.001	26.99	112.9	0.817	0.82	0.01
600	4.62	0.01	34.181	0.002	27.09	104.2	0.925	0.55	0.01
700	4.28	0.01	34.249	0.003	27.18	96.0	1.026	0.37	0.01
800	3.98	0.00	34.310	0.001	27.26	88.9	1.118	0.29	0.01
1000	3.45	0.01	34.395	0.004	27.38	78.1	1.285	0.32	0.04
1200	3.01	0.00	34.451	0.000	27.47	70.2	1.433	0.52	0.00
1500	2.45	0.00	34.507	0.000	27.56	61.4	1.631	0.88	0.00

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STATION 280-013													OBSERVED VALUES									
DATE		3/10/61	HR 18	LAT 47-25N		LONG 127-10W		SDG 2561		WEA 01												
SECD1	BA 10	CL 6	AMT 5	DRY	WET		RELHU		VIS 7													
WVEL	5 DIR 23	SEA 3	DIR 23	SWL 4	DIR	WA 35.17																
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S											
P A	2	0	9.23	32.569	25.20	6.27	0.87	13	5.6	0.19	0.85	5.96										
	7										0.84	3.86										
	2	9	9.24	32.566	25.20	6.23	1.56	13	6.6													
A	2	19	9.22	32.568	25.20	6.14	1.90	9	5.7	0.23	0.82	0.92										
	24																					
	2	28	9.21	32.572	25.21	6.14	0.78	12	5.0													
A	2	38	9.22	32.568	25.20	6.13	0.88	10	6.2													
	2	49							0.07	0.73	0.08											
	2	57	9.22	32.570	25.20	6.10	0.94	7	5.6													
	2	76	9.28	32.668	25.27	5.86	1.03	12	6.7													
	2	95	9.02	33.468	25.94	4.00	1.89	26	19.0													
	2	119	8.40	33.646	26.17	3.57	1.94	30	22.7													
	2	143	8.06	33.756	26.31	3.08	1.89	38	23.5													
	1	150	7.86	33.802	26.38	3.18	2.08															
	2	167	7.76	33.837	26.42	2.84	2.25	41	25.7													
	1	224	6.96	33.962	26.63	2.24	2.23	45	24.6													
	1	372	5.79	34.050	26.85	1.20	2.79	51	31.8													
	1	558	4.90	34.165	27.05	0.58	3.09	67	30.8													
	1	780	4.11	34.302	27.24	0.29	3.28	126	42.8													
	1	1221	3.00	34.480	27.49	0.47	3.60	160	45.7													
	1	1731	2.05	34.577	27.65	1.14	3.06	180	45.0													

STATION 280-013 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.23	0.00	32.569	0.000	25.20	277.4	0.000	6.27	0.00
10	9.24	0.00	32.566	0.000	25.20	277.9	0.028	6.22	0.00
20	9.22	0.00	32.569	0.000	25.20	277.6	0.056	6.14	0.00
30	9.21	0.00	32.571	0.000	25.21	277.5	0.084	6.14	0.00
50	9.22	0.00	32.563	0.003	25.20	278.5	0.139	6.12	0.01
75	9.28	0.00	32.653	0.005	25.26	273.3	0.208	5.90	0.01
100	8.89	0.02	33.546	0.024	26.02	201.6	0.268	3.82	0.06
150	7.86		33.802		26.38	168.4	0.360	3.18	
200	7.12	0.07	33.947	0.019	26.59	148.1	0.439	2.73	0.14
250	6.71	0.01	33.989	0.008	26.68	140.3	0.512	2.00	0.02
300	6.50	0.09	34.002	0.011	26.72	137.3	0.581	1.46	0.13
400	5.63	0.01	34.067	0.000	26.88	122.6	0.711	1.07	0.01
500	5.13	0.02	34.129	0.000	26.99	113.0	0.829	0.71	0.02
600	4.73	0.00	34.192	0.001	27.09	104.6	0.937	0.50	0.01
700	4.37	0.01	34.254	0.001	27.18	96.6	1.038	0.35	0.01
800	4.05	0.00	34.312	0.000	27.26	89.5	1.131	0.28	0.00
1000	3.50	0.01	34.404	0.002	27.38	78.0	1.299	0.29	0.03
1200	3.04	0.00	34.474	0.000	27.48	69.0	1.446	0.45	0.00
1500	2.44	---	34.548	---	27.60	58.3	1.637	0.78	---

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STATION 280-014 OBSERVED VALUES

DATE 3/11/61		HR 07	LAT 46-52N		LONG 127-08W	SDG 2561	WEA 02				
SECDI	BA 95	CL 6	AMT 8	DRY 8	WET 8.8	RELHU 93	VIS 7				
WVEL 11	DIR 22	SEA 2	DIR 22	SWL 3	DIR 15	WA 30, 34, 18, 18					
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	3	0	8.94	32.546	25.23	6.22			0.39	0.63	
A	3	7							0.16	0.60	
	3	10	8.94	32.560	25.24	6.16					
	3	19	8.96	32.554	25.23	6.17					
A	4	24							0.30	0.49	
	4	28	8.94	32.553	25.24	6.19					
	4	38	8.96	32.562	25.24	6.13					
		49									
A	3	57	8.96	32.555	25.23	6.18					
	3	76	8.50	33.296	25.88	4.22					
	3	96	7.97	33.610	26.21	3.56					
	3	121	7.66	33.757	26.37	3.07					
	3	145	7.56	33.884	26.48	2.73					
	3	170	7.11	33.899	26.56	3.06					
	1	171	7.12	33.923	26.58	2.60					
	1	258	6.34	33.988	26.73	1.92					
	1	436	5.46	34.052	26.89	1.09					
	1	660	4.84	34.164	27.05	0.76					
	2	908	3.72	34.391	27.35	0.28					
	1	1434	2.55	34.516	27.56	0.65					
	2	1961	1.92	34.603	27.68	1.34					

STATION 280-014 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.94		32.546		25.23	274.8	0.000	6.22	
10	8.94		32.550		25.24	273.9	0.028	6.16	
20	8.96	0.00	32.554	0.000	25.23	274.8	0.055	6.17	0.00
30	8.94	0.00	32.555	0.001	25.24	274.7	0.083	6.18	0.00
50	8.99	0.02	32.516	0.030	25.20	278.6	0.138	6.27	0.09
75	8.53	0.00	33.253	0.010	25.85	217.6	0.200	4.33	0.03
100	7.90	0.00	33.643	0.006	26.25	180.0	0.250	3.46	0.01
150	7.48	0.01	33.894	0.001	26.50	156.3	0.334	2.72	0.01
200	6.77	0.04	33.935	0.008	26.63	144.4	0.409	2.71	0.24
250	6.38	0.01	33.980	0.002	26.72	136.6	0.479	2.07	0.07
300	6.07	0.02	34.006	0.003	26.78	131.4	0.546	1.67	0.01
400	5.59	0.02	34.042	0.003	26.87	123.9	0.674	1.21	0.01
500	5.27	0.03	34.078	0.002	26.93	118.6	0.795	0.96	0.03
600	5.00	0.03	34.128	0.002	27.01	112.6	0.911	0.81	0.03
700	4.66	0.02	34.201	0.005	27.10	104.1	1.019	0.67	0.01
800	4.21	0.03	34.292	0.009	27.22	92.9	1.118	0.47	0.02
1000	3.47	0.01	34.424	0.005	27.40	76.1	1.287	0.28	0.02
1200	3.14	0.09	34.440	0.017	27.45	72.5	1.436	0.48	0.02
1500	2.44	---	34.529	---	27.58	59.7	1.634	0.72	---

STATION 280-014D OBSERVED VALUES

DATE 3/11/61 HR 14 LAT 46-36N LONG 127-09W SDG WEA VIS 7
 SEC'D BA 02 CL AMT DRY RELHU
 WVEL 18 DIR 26 SEA 4 DIR 22 SWL 7 DIR 22 WA

DEPTH

A

CHL-A PROD-I PROD-S
 0.29 7.80

STATION 280-015 OBSERVED VALUES

DATE 3/12/61 HR 04 LAT 46-13N LONG 127-07W SDG 2670 WEA 02
 SECDI BA 14 CL 6 AMT 8 DRY 7.8 WET 7.3 RELHU 93 VIS 7
 WVEL 7 DIR 23 SEA 4 DIR 23 SWL 4 DIR WA 15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	8.68	32.582	25.30	6.20				0.10	0.74	
A	4	8.70	32.589	25.30	6.22				0.10	0.72	
	7										
	12	8.69	32.590	25.30	6.16						
A	18	8.68	32.580	25.30	6.16				0.13	0.72	
	24										
	25	8.68	32.583	25.30	6.17						
	38	8.68	32.587	25.30	6.15						
A	49	8.68	32.588	25.30	6.17				0.04	0.62	
	51	8.66	32.590	25.31	6.18						
	64										
	81	8.50	32.816	25.51	5.53						
2	96	7.90	32.568	25.40	3.58						
2	112	7.56	33.712	26.35	3.21						
2	129	7.40	33.814	26.45	2.94						

STATION 280-015 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.68		32.582		25.30	268.3	0.000	6.20	
10	8.70	0.00	32.591	0.000	25.30	268.0	0.027	6.18	0.01
20	8.68	0.00	32.580	0.001	25.30	268.8	0.054	6.16	0.00
30	8.68		32.585	0.000	25.30	268.6	0.081	6.16	0.00
50	8.68	0.00	32.588	0.000	25.30	268.7	0.135	6.17	0.00
75	8.60	0.02	32.753	0.030	25.44	255.7	0.200	5.90	0.03
100	7.79	0.00	32.833	0.077	25.63	238.6	0.262	3.40	0.05

STATION 280-016 OBSERVED VALUES

DATE 3/12/61 HR 10 LAT 45-32N LONG 127-11W SDG 2743 WEA 63
 SECDI BA 05 CL AMT 9 DRY WET RELHU VIS 5
 WVEL 20 DIR 18 SEA 8 DIR 23 SWL 4 DIR WA 55

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	879	3.79	34.366	27.33	0.41						
1	1386	2.66	34.505	27.54	0.77						
1	1944	1.94	34.602	27.68	1.99						

STATION 280-016 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 280-017 OBSERVED VALUES									
DATE	3/13/61	HR	01	LAT	44-58N	LONG	127-09W	SDG	2816
SECD	1	BA	12	CL	6	AMT	6	RELHU	86
WVEL	4	DIR	24	SEA	9	DIR	24	SWL	4
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
P	1	0	9.68	32.686	25.22	6.43	0.99	7	5.0
A	1	7	9.68	32.670	25.21	6.43	0.88	4	4.3
	1	18	9.66	32.674	25.22	6.45	0.88	7	2.8
A	1	24	9.63	32.670	25.22	6.46	0.74	7	4.0
	1	37	9.64	32.677	25.22	6.45	0.87	4	4.3
A	1	49							
	1	56	9.62	32.680	25.23	6.45	1.19	7	3.7
	1	75	8.73	33.259	25.82	4.78	1.64	26	18.0
	1	93	8.42	33.649	26.17	3.80	2.14	36	25.0
	1	117	7.98	33.807	26.34	3.16	2.37	37	24.4
	1	140	7.75	33.880	26.45	2.71	2.48	17	28.0
	2	141	7.76	33.898	26.47	2.62	2.49	47	25.0
	1	164	7.52	33.936	26.53	2.48	2.54	51	28.0
	2	213	7.26	33.980	26.60	1.96	2.49	62	34.0
	2	353	6.33	34.045	26.78	1.47	2.81	73	27.4
	2	529	5.25	34.168	26.99	0.67	3.27	91	36.6
	3	779	4.34	34.291	27.21	0.34	3.44	123	42.8
	3	1253	3.04	34.480	27.49	0.45	3.43	156	42.7
	3	1809	2.05	34.588	27.66	1.29	3.22	177	43.3

PROD-I

PROD-S

STATION 280-017 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.68	0.00	32.686	0.000	25.22	275.6	0.000	6.43	0.00
10	9.68	0.00	32.670	0.000	25.21	276.9	0.028	6.43	0.00
20	9.65	0.00	32.673	0.001	25.22	276.5	0.056	6.45	0.00
30	9.63	0.00	32.671	0.000	25.22	276.5	0.083	6.46	0.00
50	9.68	0.03	32.649	0.021	25.19	279.2	0.139	6.54	0.06
75	8.73	0.01	33.259	0.011	25.82	220.0	0.201	4.78	0.02
100	8.28	0.00	33.721	0.003	26.25	179.7	0.251	3.58	0.00
150	7.66	0.00	33.910	0.001	26.49	157.5	0.336	2.58	0.00
200	7.32	0.01	33.971	0.001	26.59	148.9	0.412	2.09	0.01
250	7.01	0.00	34.000	0.004	26.65	143.3	0.485	1.79	0.04
300	6.69	0.01	34.024	0.005	26.73	136.2	0.555	1.58	0.06
400	6.02	0.01	34.077	0.002	26.84	126.8	0.687	1.24	0.02
500	5.41	0.01	34.147	0.002	26.97	115.1	0.808	0.79	0.02
600	4.95	0.02	34.207	0.002	27.07	106.1	0.918	0.51	0.02
700	4.58	0.02	34.256	0.002	27.16	99.0	1.021	0.38	0.02
800	4.27	0.00	34.301	0.000	27.22	93.0	1.117	0.33	0.00
1000	3.67	0.01	34.388	0.001	27.35	81.2	1.291	0.30	0.02
1200	3.16	0.00	34.463	0.001	27.46	71.2	1.443	0.40	0.01
1500	2.53	---	34.543	---	27.58	59.7	1.640	0.73	---

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STATION 280-018 OBSERVED VALUES													
DATE	3/13/61	HR	16	LAT	44-36N	LONG	126-24W	SDG	2743	WEA	61		
SECDI	BA	11	CL	AMT	9	DRY	9.6	WET	9.6	RELHU	99	VIS	6
WVEL	4	DIR	09	SEA	2	DIR	09	SWL	4	DIR	26	WA	28, 40, 35, 18
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	5	9.24	32.595	25.22	6.70				0.15	1.12	7.41		
A	10	9.24	32.598	25.22	6.76				0.10	0.76			
A	20	9.28	32.622	25.24	6.71				0.30	1.03			
	24	9.28	32.619	25.23	6.71				0.20	0.83			
	29	9.28	32.620	25.23	6.65								
A	49	9.26	32.618	25.24	6.66								
	58	9.18	32.623	25.25	6.65								
	77	8.90	32.747	25.39	6.27								
	120	8.26	33.442	26.03	4.37								
	144	7.95	33.713	26.29	3.64								
	153	7.72	33.832	26.42	3.37								
	168	7.57	33.867	26.47	2.99								
	229	6.82	33.973	26.66	2.41								
	383	5.68	34.075	26.88	1.11								
	571	5.27	34.175	27.01	0.70								
	866	3.81	34.365	27.32	0.46								
	1350	2.76	34.508	27.54	0.73								
	1904	1.99	34.596	27.67	1.67								

STATION 280-018 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.24		32.595		25.22	275.6	0.000	6.70	
10	9.24		32.598		25.22	275.6	0.028	6.76	
20	9.28		32.622		25.24	274.6	0.056	6.71	
30	9.28	0.00	32.619	0.000	25.23	275.0	0.083	6.70	0.00
50	9.27	0.00	32.619	0.000	25.23	275.3	0.138	6.65	0.01
75	9.19	0.00	32.620	0.002	25.25	274.4	0.207	6.66	0.01
100	8.82	0.01	32.833	0.019	25.47	253.4	0.273	6.03	0.05
150	7.81	0.03	33.788	0.017	26.37	168.7	0.378	3.46	0.01
200	7.18	0.02	33.929	0.001	26.57	150.3	0.458	2.59	0.06
250	6.61	0.01	33.994	0.004	26.70	138.6	0.530	2.20	0.01
300	6.18	0.01	34.036	0.009	26.79	130.6	0.598	1.74	0.03
400	5.63	0.02	34.084	0.001	26.90	121.3	0.724	1.04	0.01
500	5.39	0.06	34.138	0.002	26.97	115.5	0.842	0.77	0.04
600	5.13	0.02	34.195	0.002	27.04	109.3	0.954	0.66	0.00
700	4.65	0.07	34.260	0.005	27.15	99.6	1.059	0.55	0.01
800	4.15	0.05	34.324	0.003	27.25	89.9	1.154	0.48	0.01
1000	3.42	0.04	34.418	0.005	27.40	76.0	1.319	0.47	0.01
1200	2.98	0.05	34.478	0.005	27.49	67.9	1.463	0.57	0.01
1500	2.51	---	34.540	---	27.58	59.7	1.655	0.92	---

STATION 280-019 OBSERVED VALUES

DATE 3/13/61 HR 23 LAT 44-21N LONG 125-49W SDG 1852 WEA 61
SECD1 BA 15 CL 6 AMT 9 DRY 11.1 WET 11.1 RELHU 99 VIS 5
WVEL 14 DIR 21 SEA 3 DIR 21 SWL 4 DIR 20 WA 59.30

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-II
P A	2	0	9.51	32.564	25.15	6.71				0.36	1.46	
	2	9	9.50	32.566	25.16	6.58				0.68	1.23	
A	2	18	9.50	32.564	25.16	6.71						
	2	25	9.48	32.568	25.16	6.71					1.19	
	2	35	9.45	32.572	25.17	6.70						
A		49										
	2	52	9.41	32.584	25.19	6.65						
	2	70	9.28	32.620	25.23	6.50				0.66	0.82	
	2	87	7.99	33.187	25.87	4.52						
	2	108	7.72	33.482	26.14	3.94						
	2	130	7.44	33.714	26.37	3.89						
	2	152	7.11	33.838	26.51	3.54						
	1	352	5.65	34.051	26.87	1.25						
	1	511	4.85	34.163	27.05	0.55						
	1	648	4.32	34.251	27.18	0.65						
	1	808	3.94	34.346	27.29	0.03						

STATION 280-019 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.51	0.00	32.564	0.000	25.15	282.9	0.000	6.71	0.01
10	9.50	0.00	32.566	0.000	25.16	281.9	0.029	6.59	0.00
20	9.50	0.00	32.565	0.000	25.16	282.1	0.057	6.72	0.00
30	9.47	0.00	32.560	0.000	25.17	281.5	0.085	6.71	0.00
50	9.42	0.00	32.582	0.000	25.18	280.2	0.141	6.66	0.00
75	8.91	0.07	32.775	0.028	25.41	258.6	0.209	5.94	0.11
100	7.74	0.06	33.400	0.015	26.08	195.7	0.265	4.01	0.06
150	7.14	0.00	33.829	0.001	26.50	156.4	0.353	3.58	0.00
200	6.61	0.07	33.968	0.048	26.68	139.8	0.427	2.85	0.00
250	6.19	0.09	34.050	0.065	26.80	129.0	0.495	2.22	0.00
300	5.87	0.07	34.079	0.050	26.86	123.5	0.558	1.69	0.00
400	5.38	0.00	34.088	0.001	26.93	118.0	0.679	0.94	0.00
500	4.90	0.00	34.156	0.000	27.04	108.2	0.792	0.57	0.00
600	4.49	0.00	34.221	0.000	27.14	99.6	0.896	0.61	0.05
700	4.17	---	34.283	---	27.22	92.2	0.991	0.54	---
800	3.95	---	34.341	---	27.29	86.2	1.081	0.08	---

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STATION 280-020 OBSERVED VALUES

DATE 3/15/61 HR 04 LAT 44-34N LONG 124-10W SDG 51 WEA 63
 SECDI BA 99 CL AMT 9 DRY 11.1 WET 11.1 RELHU 99 VIS 4
 WVEL 11 DIR 20 SEA 4 DIR 20 SWL 3 DIR 21 WA 21.21

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	10.26	32.023	24.61	6.76	0.96	10	3.3	0.74	1.66	
	3	10.27	32.027	24.61	6.65	0.97	13	4.4			
	6	10.28	32.029	24.61	6.70	0.94	11	3.2			
A	7										
	9	10.28	32.037	24.62	6.70	0.89	10	3.4	0.23	2.28	
P	14	10.28	32.044	24.62	6.68	0.92	12	3.3	0.45	1.65	
	19	10.26	32.060	24.64	6.48	0.94	13	2.7			
	23	10.26	32.083	24.66	6.60	0.92	16	4.0			
	28	10.26	32.089	24.66	6.47	1.02	13	4.3			
	37	10.23	32.117	24.69	6.45	0.89	15	4.3			

STATION 280-020 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
M	0	10.26	32.023		24.61	333.9	0.000	6.76	
	10	10.28	32.035	0.000	24.61	333.6	0.034	6.73	0.01
	20	10.26	32.066	0.001	24.64	331.0	0.067	6.51	0.01
	30	10.26	32.093	-.000	24.66	329.2	0.100	6.44	-.01

DATE 3/15/61 HR 01 LAT 44-39N LONG 124-21W SDG 82 WEA 50
 SECD1 BA 99 CL 6 AMT 8 DRY 9.6 WET 9.6 RELHU 99 VIS 6
 WVEL 14 DIR 20 SEA 6 DIR 20 SWL 4 DIR 20 WA 20

STATION 280-021		OBSERVED VALUES									
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	10.17	32.661	25.12	6.59				0.15	1.31	
	3	10.16	32.655	25.12	6.47						
	6	10.16	32.662	25.12	6.55						
	9	10.16	32.662	25.12	6.55						
A	1	10.16	32.662	25.12	6.55						
	18	10.16	32.662	25.12	6.55						
	19	10.16	32.667	25.13	6.54				0.38	1.22	
	24	10.14	32.658	25.12	6.55						
	28	10.14	32.658	25.12	6.55						
A	1	10.09	32.664	25.14	6.54				0.79	1.14	
	36	10.09	32.664	25.14	6.54						
	56	9.95	32.671	25.17	6.51						

STATION 280-021		INTERPOLATED AND COMPUTED VALUES							
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.17		32.661		25.12	285.2	0.000	6.59	
10	10.16	0.00	32.662	0.000	25.12	285.2	0.029	6.55	0.00
20	10.16	0.00	32.665	0.001	25.13	285.0	0.058	6.54	0.00
30	10.13	0.00	32.659	0.000	25.13	285.3	0.086	6.55	0.00
50	10.00	---	32.669	---	25.15	282.9	0.143	6.52	---

STATION 280-022 OBSERVED VALUES													
DATE	3/15/61	HR	04	LAT	44-48N	LONG	124-41W	SDG	318	WEA	02		
SECDI	BA	99	CL	AMT	DRY	10.0	WET	9.6	RELHU	93	VIS	7	
WVEL	15	DIR	18	SEA	4	DIR	18	SWL	DIR	WA	25.42	25	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	3	9.56	32.576	25.16	6.71	0.78			0.15	0.41			
	3	9.54	32.576	25.16	6.65	0.74							
	3	9.56	32.576	25.16	6.66	0.82							
	10	9.54	32.576	25.16	6.70	0.84							
	15	9.55	32.576	25.16	6.62	0.87							
	20	9.54	32.576	25.16	6.70	0.82							
	24	9.54	32.576	25.16	6.64	0.93							
	29	9.53	32.576	25.16	6.73	0.84							
	31												
A	3	9.54	32.576	25.16	6.68	0.84			0.60	0.55			
	3	9.53	32.576	25.16	6.62	0.82							
	58												
	62												
A	3	9.48	32.631	25.21	6.53	0.99			0.29	0.42			
	3	8.86	33.326	25.85	4.93	1.76							
	1	8.66	33.493	26.01	4.37	1.88							
	135	8.31	33.678	26.21	3.81	2.11							
	157	8.34	33.820	26.32	3.17	2.42							
	160	8.36	33.794	26.29	3.28	2.32							
	240	6.87	33.977	26.65	2.36	2.73							

STATION 280-022 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.56		32.576		25.16	281.9	0.000	6.71	
10	9.54		32.576		25.16	281.8	0.029	6.70	
20	9.54	0.00	32.576	0.000	25.16	282.0	0.057	6.70	
30	9.53		32.576		25.16	282.0	0.085	6.73	0.00
50	9.54	0.00	32.573	0.002	25.16	282.7	0.142	6.64	0.00
75	9.51	0.01	32.599	0.014	25.18	280.8	0.212	6.60	0.03
100	8.81	0.01	33.373	0.009	25.90	213.3	0.274	4.79	0.02
150	8.33	0.03	33.765	0.010	26.28	177.9	0.372	3.43	0.03
200	7.91	---	33.942	---	26.48	159.6	0.456	2.58	---

STATION 280-023 OBSERVED VALUES

DATE 3/15/61 HR 10 LAT 45-01N LONG 125-20W SDG 2377 WEA 60
 SECDI BA 98 CL AMT 9 DRY 9.1 WET 9.1 RELHU 99 VIS 6
 WVEL 14 DIR 18 SEA 3 DIR 18 SWL 4 DIR WA 50.23.28

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	10.20	32.643	25.10	6.32	0.79					
2	9	10.20	32.643	25.10	6.32	0.87					
2	18	10.20	32.643	25.10	6.28	0.78					
2	28	10.20	32.645	25.10	6.28	0.73					
2	37	10.20	32.645	25.10	6.32	0.78					
2	55	10.19	32.671	25.13	6.27	0.89					
2	74	10.18	32.696	25.15	6.23	0.78					
3	87	10.18	32.729	25.17	6.22	0.83					
3	105	9.69	33.170	25.60	4.94	1.38					
3	126	8.60	33.551	26.07	3.89	1.78					
3	148	8.12	33.775	26.32	3.10	2.13					
1	256	6.52	33.985	26.71	2.07	2.27					
1	696	4.37	34.303	27.22	0.41	3.48					

STATION 280-023 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.20	0.00	32.643	0.000	25.10	287.0	0.000	6.32	0.00
10	10.20	0.00	32.643	0.000	25.10	287.2	0.029	6.32	0.00
20	10.20	0.00	32.643	0.000	25.10	287.4	0.058	6.28	0.00
30	10.20	0.00	32.645	0.000	25.10	287.5	0.087	6.29	0.00
50	10.19	0.00	32.662	0.001	25.12	286.4	0.144	6.29	0.01
75	10.19	0.00	32.694	0.003	25.14	284.4	0.215	6.24	0.01
100	9.88	0.01	33.020	0.019	25.46	255.1	0.283	5.35	0.06
150	8.08	0.00	33.786	0.004	26.33	172.8	0.390	3.06	0.01
200	7.24	0.03	33.972	0.059	26.60	148.0	0.470	2.29	0.19
250	6.59	0.01	33.993	0.012	26.70	138.3	0.542	2.06	0.04
300	5.99	---	34.056	---	26.83	126.7	0.608	1.72	---
400	5.04	---	34.184	---	27.05	106.8	0.725	1.08	---
500	4.46	---	34.268	---	27.18	94.8	0.825	0.65	---
600	4.24	---	34.307	---	27.23	90.3	0.918	0.42	---

STATION 280-024 OBSERVED VALUES													
DATE	3/15/61	HR	15	LAT	45-10N	LONG	124-54W	SDG	823	WEA	01		
SECDI	BA	00	CL	8	AMT	6	DRY	WET	RELHU	VIS	7		
WVEL	9	DIR	20	SEA	3	DIR	20	SWL	4	DIR	22	WA	40, 18
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	0	10.04	32.622	25.11	6.26				0.29	1.51	7.30		
	10	10.02	32.630	25.12	6.26								
	20	10.02	32.632	25.12	6.26								
A	29	10.06	32.646	25.13	6.25				0.21	1.32			
	31												
	39	10.10	32.666	25.14	6.27								
	58	10.14	32.685	25.14	6.27								
A	62								0.30	1.32			
	78	10.14	32.684	25.14	6.26								
	97	9.82	33.048	25.48	5.17								
	121	8.85	33.532	26.01	3.99								
	145	8.11	33.787	26.33	3.19								
	164	7.90	33.818	26.38	3.06								
	169	7.64	33.876	26.47	2.93								
	248	6.79	33.965	26.65	2.25								
	433	5.52	34.086	26.91	1.01								
	665	4.62	34.238	27.14	0.38								

STATION 280-024 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	10.04		32.622		25.11	286.0	0.000	6.26	
10	10.02		32.620		25.12	285.3	0.029	6.26	
20	10.02		32.632		25.12	285.3	0.058	6.26	
30	10.06	0.00	32.648	0.000	25.13	285.0	0.086	6.25	0.00
50	10.13	0.00	32.670	0.000	25.14	284.1	0.143	6.27	0.00
75	10.15	0.01	32.672	0.009	25.13	285.5	0.214	6.30	0.02
100	9.71	0.02	33.114	0.005	25.55	246.3	0.281	5.01	0.00
150	8.01	0.01	33.809	0.001	26.36	170.1	0.385	3.12	0.01
200	7.37	0.06	33.896	0.012	26.52	155.4	0.466	2.71	0.04
250	6.77	0.00	33.967	0.000	26.66	142.8	0.541	2.23	0.00
300	5.36	0.02	34.005	0.004	26.74	135.2	0.610	1.84	0.01
400	5.69	0.01	34.069	0.003	26.88	123.2	0.739	1.19	0.00
500	5.18	---	34.120	---	26.99	113.6	0.858	0.72	---
600	4.79	---	34.195	---	27.08	105.1	0.967	0.45	---

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STATION 280-025 OBSERVED VALUES

DATE 3/15/61 HR 18 LAT 45-19N LONG 124-30W
SECDI C BA 02 CL 8 AMT 5 DRY WET
SDG RELHU

DATE 3/15/61 HR 18 LAT 45-19N LONG 124-30W SDG
SECDI BA 02 CL 8 AMT 5 DRY WET REL HU
WVEL 10 DIR 18 SEA 3 DIR 18 SWL 4 DIR 22 WA 09, 06

WEA 01
VIS 7

SDG
REL HU
09, 06

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	10.09	32.557	25.05	6.29						
	2	3	10.09	32.564	25.06	6.28				0.41	1.37	11.76
	2	6	10.09	32.566	25.06	6.27						
A		7										
	2	10	10.08	32.565	25.06	6.28				0.25	1.24	7.62
	2	15	10.07	32.564	25.06	6.27						
	2	20	10.08	32.569	25.06	6.27						
A		24										
	2	25	10.06	32.570	25.07	6.25				0.36	1.13	2.22
	2	30	10.06	32.564	25.06	6.26						
	2	40	10.06	32.569	25.07	6.26						
A		49										
	2	60	10.06	32.565	25.06	6.24				0.22	0.97	0.06
	2	80	10.02	32.678	25.16	6.16						
	2	100	9.72	32.990	25.45	5.29						
	1	122	8.94	32.507	25.20	3.95						
	1	147	8.40	33.629	26.16	3.74						
	1	171	7.96	33.769	26.33	3.32						
	1	195	7.56	33.883	26.48	2.74						
	1	293	6.20	33.998	26.76	1.95						

STATION 280-025 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.09		32.557		25.05	291.6	0.000	6.29	
10	10.08		32.565		25.06	291.0	0.030	6.28	
20	10.08		32.569		25.06	290.9	0.059	6.27	
30	10.06		32.564		25.06	291.2	0.088	6.26	
50	10.06	0.00	32.561	0.006	25.06	291.8	0.146	6.26	0.00
75	10.04	0.01	32.635	0.003	25.12	286.5	0.218	6.22	0.02
100	9.72		32.980		25.45	255.6	0.286	5.29	
150	8.34	0.00	33.672	0.016	26.20	185.0	0.396	3.70	0.00
200	7.48	---	33.902	---	26.51	156.4	0.482	2.64	---
250	6.74	---	34.017	---	26.70	138.6	0.555	1.98	---

STATION 280-026 OBSERVED VALUES

DATE 3/15/61 HR 21 LAT 45-26N LONG 124-13W SDG 137 WEA 01
 SEC DI BA 07 CL 6 AMT 5 DRY 10.7 WET 9.3 RELHU 87 VIS
 WVEL 13 DIR 23 SEA 3 DIR 23 SWL 4 DIR 22 WA 14

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.70	32.624	25.17	6.37	0.83	8	3.9	0.23	1.34	
	3	9.70	32.617	25.16	6.38	0.84	6	3.7			
	6	9.70	32.619	25.17	6.33	0.80	8	3.5			
A	7								0.28	1.25	
	10	9.68	32.632	25.18	6.34	0.87	7	4.0			
	15	9.68	32.631	25.18	6.27	0.92	6	3.3			
	20	9.68	32.651	25.19	6.28	0.91	8	3.3			
A	23								0.25	1.04	
	24	9.70	32.652	25.19	6.24	0.82	10	4.2			
	29	9.74	32.783	25.29	6.19	0.93	7	3.4			
	39	9.72	32.745	25.26	6.10		10	3.1			
A	46								0.11	0.68	
	59	9.70	32.744	25.26	6.01	0.82	8	3.3			
	78	9.68	32.760	25.28	5.99	0.89	9	3.8			
	98	9.64	32.776	25.30	5.94	1.02	10	4.1			
	123	9.57	32.813	25.34	5.76	1.04	11	4.2			

STATION 280-026 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.70		32.624		25.17	280.5	0.000	6.37	
10	9.68		32.632		25.18	279.8	0.029	6.34	
20	9.68		32.651		25.19	278.6	0.056	6.28	
30	9.74	0.00	32.788	0.006	25.29	269.6	0.084	6.18	0.00
50	9.71	0.00	32.737	0.003	25.26	273.2	0.138	6.04	0.00
75	9.68	0.00	32.757	0.000	25.28	271.8	0.206	5.99	0.00
100	9.64	---	32.778	---	25.30	269.9	0.274	5.93	---

STATION 280-027 OBSERVED VALUES

DATE 3/16/61 HR 00 LAT 45-31N LONG 124-01W SDG 37 WEA 02
 SECID 1 BA 10 CL 8 AMT 6 DRY 10.5 WET 9.3 RELHU 87 VIS 7
 WVEL 10 DIR 22 SEA 3 DIR 22 SWL 4 DIR 22 WA 07

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.29	31.075	23.87	6.44	0.88		0.33	2.60	
A	1	3	10.30	31.075	23.87	6.47	0.88		0.37	2.27	
	1	6	10.30	31.075	23.87	6.47	0.84				
A	1	8	10.29	31.075	23.87	6.47	0.58		0.47	2.26	
	1	10	10.29	31.075	23.87	6.47	0.88				
	1	15	10.29	31.075	23.87	6.47	0.88				
	1	16	10.28	31.083	23.88	6.50	0.89		0.23	2.25	
A	1	20	10.26	31.106	23.90	6.48	0.82				
	1	30	10.22	31.469	24.19	6.37	0.88				

STATION 280-027 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.29		31.075		23.87	404.6	0.000	6.44	
10	10.29		31.075		23.87	404.8	0.041	6.47	
20	10.28		31.083		23.88	404.2	0.081	6.50	
30	10.22		31.469		24.19	374.8	0.120	6.37	

STATION 280-028 OBSERVED VALUES

DATE 3/16/61 HR 05 LAT 45-35N LONG 124-30W SDG 232 WEA 02
 SECD1 BA 12 CL 8 AMT 7 DRY 8.9 WET 6.8 RELHU 73 VIS 7
 WVEL 10 DIR 24 SEA 3 DIR 24 SWL 4 DIR 22 WA 15, 08, 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	9.98	32.613	25.12	6.35	0.85			0.43	0.82	
	3	9.98	32.613	25.12	6.36	0.84					
	6	9.98	32.613	25.12	6.40	0.78					
A	7								0.27	0.98	
	10	9.98	32.613	25.12	6.36	0.87					
	14	9.98	32.614	25.12	6.34	0.89					
	19	9.98	32.617	25.12	6.34	0.84					
P	24	9.97	32.617	25.12	6.33	0.70			0.54	0.71	
	28	9.96	32.618	25.12	6.32	0.80					
	38	9.95	32.615	25.12	6.33	0.78					
A	49								0.09	0.88	
	57	9.59	32.658	25.21	6.18	0.82					
	77	9.48	32.700	25.26	6.10	0.98					
	96	9.38	32.838	25.39	5.78	1.07					
	121	8.61	33.516	26.04	3.84	1.81					
	146	8.00	33.795	26.35	2.78	2.09					
	171	7.85	33.826	26.40	2.78	2.11					
	196	7.74	33.868	26.44	2.70	2.39					

STATION 280-028 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.98		32.613		25.12	285.7	0.000	6.35	
10	9.98		32.613		25.12	285.9	0.029	6.36	
20	9.98	0.00	32.617	0.000	25.12	285.8	0.058	6.34	0.00
30	9.96	0.00	32.617	0.001	25.12	285.7	0.086	6.32	0.00
50	9.73	0.03	32.639	0.003	25.18	280.9	0.143	6.24	0.01
75	9.48	0.00	32.693	0.002	25.26	273.4	0.212	5.11	0.01
100	9.28	0.02	32.941	0.022	25.49	252.3	0.278	5.50	0.06
150	7.96	0.01	33.808	0.006	26.37	169.4	0.383	2.75	0.03

STATION 280-029 OBSERVED VALUES

DATE 3/16/61 HR 06 LAT 45-39N LONG 124-58W SDG 1609 WEA 02
 SECD1 BA 14 CL 0 AMT 9 DRY 9.7 WET 7.2 RELHU 67 VIS 7
 WVEL 10 DIR 23 SEA 3 DIR 23 SWL 4 DIR WA 30, 20, 12, 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
3	0	10.14	32.694	25.15	6.28	1.01					
3	10	10.16	32.694	25.15	6.28	0.89					
3	20	10.16	32.694	25.15	6.12	0.83					
3	29	10.14	32.694	25.15	6.28	0.84					
4	36	10.20	32.718	25.16	6.28	0.93					
4	54	10.24	32.766	25.19	6.16	0.98					
4	73	10.26	32.770	25.19	6.18	0.93					
4	91	10.04	33.254	25.60	4.66	1.60					
4	114	9.97	33.356	25.69	4.31	1.56					
1	234	7.59	33.868	26.47	2.93	2.24					
1	390	5.86	34.041	26.83	1.46	2.83					
2	666	4.60	34.238	27.14	0.44	3.28					
2	931	3.77	34.389	27.35	0.37	3.57					

STATION 280-029 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.14		32.694		25.15	282.3	0.000	6.28	
10	10.16		32.694		25.15	282.8	0.029	6.28	
20	10.16		32.694		25.15	283.0	0.057	6.12	
30	10.15	0.00	32.697	0.000	25.15	282.7	0.085	6.28	0.00
50	10.24	0.00	32.758	0.001	25.18	280.1	0.142	6.19	0.01
75	10.24	0.01	32.821	0.014	25.23	275.9	0.211	6.02	0.04
100	10.01	0.01	33.328	0.023	25.67	235.1	0.275	4.42	0.07
150	9.39	0.15	33.529	0.010	25.93	211.4	0.387	3.85	0.02
200	8.39	0.15	33.741	0.010	26.25	181.4	0.485	3.27	0.02
250	7.36	0.01	33.890	0.008	26.52	155.7	0.569	2.76	0.00
300	6.72	0.03	33.978	0.021	26.67	141.9	0.644	2.25	0.01
400	5.79	0.01	34.050	0.001	26.85	125.9	0.777	1.40	0.01
500	5.20	0.08	34.130	0.004	26.99	113.7	0.897	0.87	0.04
600	4.78	0.06	34.199	0.003	27.09	104.6	1.006	0.55	0.03
700	4.47	---	34.259	---	27.17	97.5	1.108	0.38	---
800	4.13	---	34.319	---	27.25	90.0	1.201	0.29	---

STATION 280-030 OBSERVED VALUES													
DATE 3/16/61		HR 16		LAT 45-39N		LONG 125-28W		SDG 3341		WEA 02			
SECDI		BA 12		CL 6		AMT 7		DRY 9.4		WET 8.1		RELHU 80	
WVEL 10		DIR 18		SEA 3		DIR 18		SWL 4		DIR 18		WA 25, 35, 15	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	3	9.24	32.599	25.22	6.56	0.84	11	4.7	0.54	1.22	8.08		
A	7								0.68	1.37			
	9	9.23	32.599	25.23	6.46	0.84	8	4.4					
	18	9.25	32.599	25.22	6.44	0.78	11	4.4	0.35	1.16			
A	24	9.23	32.599	25.23	6.43	0.79	13	4.2					
	26	9.24	32.599	25.22	6.43	0.89	6	3.4					
	35												
A	49								0.25	0.82			
	53	9.24	32.599	25.22	6.46	0.88	10	3.5					
	71	9.38	32.985	25.50	5.40	1.24	17	7.3					
	88	8.56	33.414	25.97	4.24	1.92	20	12.7					
	120	8.06	33.667	26.24	3.61	2.15	35	19.2					
	145	7.59	33.795	26.41	3.28	2.22	42	21.2					
	169	7.17	33.887	26.54	2.90	2.42	42	20.7					
	177	7.26	33.877	26.52	2.98	2.24	36	16.9					
	266	6.33	33.989	26.73	2.16	2.42	73	23.8					
1	384	5.54	34.047	26.88	1.31	2.93	60	23.4					
2	573	4.69	34.196	27.10	0.46	3.29	117	31.1					
2	820	3.98	34.358	27.30	0.32	3.37	140	31.1					
2	1328	2.86	34.496	27.52	0.60	3.13	155	30.1					

STATION 280-030 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.24	0.00	32.599	0.000	25.22	275.3	0.000	6.56	0.00
10	9.23	0.00	32.599	0.000	25.23	275.4	0.028	6.46	0.00
20	9.25	0.00	32.599	0.000	25.22	275.8	0.056	6.44	0.00
30	9.23	0.00	32.599	0.000	25.23	275.7	0.083	6.43	0.00
50	9.24	0.00	32.586	0.009	25.21	277.1	0.138	6.49	0.03
75	9.21	0.04	33.092	0.008	25.61	239.6	0.203	5.11	0.02
100	8.30	0.06	33.557	0.024	26.12	192.0	0.257	3.87	0.07
150	7.52	0.01	33.813	0.002	26.43	162.8	0.346	3.22	0.01
200	6.87	0.08	33.939	0.018	26.62	145.4	0.423	2.64	0.08
250	6.42	0.03	33.988	0.010	26.72	136.7	0.493	2.25	0.03
300	6.07	0.01	34.000	0.004	26.78	131.1	0.560	1.89	0.00
400	5.45	0.00	34.059	0.001	26.90	121.0	0.686	1.21	0.00
500	4.97	0.01	34.136	0.004	27.02	110.6	0.802	0.71	0.00
600	4.60	0.01	34.216	0.000	27.12	101.2	0.908	0.41	0.01
700	4.29	0.01	34.285	0.001	27.21	93.4	1.005	0.31	0.04
800	4.03	0.00	34.347	0.000	27.29	86.7	1.095	0.31	0.01
1000	3.53	----	34.437	-----	27.41	75.9	1.258	0.33	----
1200	3.10	----	34.486	-----	27.49	68.7	1.403	0.46	----

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STATION 280-031

DATE 3/16/61 HR 16 LAT 45-43N LONG 126-00W SDG 2459 WEA 61
SECDI BA 08 CL 6 AMT 8 DRY 9.0 WET 8.8 RELHU 99 VIS 5
WVEL 15 DIR 18 SEA 3 DIR 18 SWL 4 DIR WA 20, 36, 32

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	1	9	9.04	32.599	25.26	6.47				0.42	0.85	7.50
	1	9	9.04	32.604	25.26	6.46				0.17	0.88	3.42
	1	18	9.04	32.604	25.26	6.44						
A	1	24										
	1	28	9.05	32.609	25.26	6.53	0.82			0.27	0.76	0.30
	1	37	9.04	32.611	25.27	6.43	0.82					
A	1	49										
	1	56	9.03	32.609	25.27	6.47	0.86					
	1	75	8.80	32.787	25.44	6.07	1.02					
	1	94	8.04	33.578	26.17	3.68	2.04			0.14	0.67	0.00
	1	118	7.48	33.691	26.34	3.72						
	1	141	7.16	33.839	26.50	3.21	2.18					
	3	162	6.91	33.904	26.59	3.15	2.10					
	1	165	6.94	33.882	26.57	3.14	2.16					
	3	247	6.00	34.013	26.79	2.24	2.53					
	3	426	4.98	34.082	26.97	0.94	2.94					
	2	549	4.88	34.184	27.09	0.65	2.88					
	2	792	3.94	34.332	27.28	0.34	3.17					
	2	1289	2.86	34.493	27.52	0.66	3.41					

STATION 280-031 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.04	0.00	32.599	0.000	25.26	272.3	0.000	6.47	0.00
10	9.04	0.00	32.604	0.000	25.26	272.1	0.028	6.46	0.01
20	9.04	0.00	32.605	0.000	25.26	272.3	0.055	6.46	0.01
30	9.05	0.00	32.600	0.000	25.26	272.2	0.082	6.51	0.01
50	9.04	0.01	32.600	0.007	25.26	273.2	0.137	6.46	0.03
75	8.80	0.01	32.787	0.032	25.44	256.1	0.203	6.07	0.12
100	7.87	0.01	33.651	0.007	26.26	178.9	0.257	3.56	0.02
150	7.06	0.01	33.865	0.007	26.54	152.7	0.340	3.17	0.02
200	6.49	0.01	33.964	0.013	26.69	138.6	0.413	2.80	0.05
250	5.97	0.00	34.015	0.001	26.80	128.9	0.480	2.21	0.00
300	5.59	0.03	34.044	0.014	26.87	122.6	0.543	1.75	0.00
400	5.06	0.01	34.078	0.008	26.96	114.9	0.661	1.07	0.00
500	4.78	0.02	34.142	0.003	27.04	107.9	0.773	0.73	0.02
600	4.53	0.01	34.210	0.001	27.13	100.1	0.877	0.56	0.00
700	4.22	0.01	34.283	0.001	27.21	92.8	0.973	0.42	0.00
800	3.92	---	34.336	---	27.29	86.2	1.063	0.34	---
1000	3.42	---	34.423	---	27.41	75.7	1.225	0.32	---
1200	3.01	---	34.478	---	27.49	68.3	1.369	0.51	---

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STATION 280-032 OBSERVED VALUES									
DATE	3/17/61	HR	09	LAT	45-50N	LONG	125-13W	SDG	1317
SECDI	BA	00	CL	AMT	9	DRY	WET	RELHU	WEA
WVEL	13	DIR	16	SEA	3	DIR	16	WA	38, 38, 22
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
3	C	9.26	32.613	25.23	6.51	0.79			
3	10	9.26	32.598	25.22	6.37	0.84			
3	19	9.27	32.610	25.23	6.23	0.74			
3	28	9.26	32.610	25.23	6.30	0.84			
3	37	9.27	32.602	25.22	6.29	0.91			
3	55	9.26	32.615	25.23	6.36	0.90			
3	73	9.27	32.613	25.23	6.26	0.90			
3	92	9.45	32.991	25.50	5.40	1.33			
3	115	8.31	33.554	26.11		1.86			
3	139	7.86	33.774	26.35	3.15	1.92			
2	142	7.76	33.789	26.38	3.27	2.36			
3	162	7.48	33.901	26.51	2.79	2.16			
2	213	7.08	33.961	26.61	2.55				
2	380	5.72	34.050	26.86	1.40	2.98			
1	555	4.96	34.195	27.06	0.59	3.14			
1	778	3.96	34.369	27.31	0.34	3.55			

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP. VOL. ANOMALY	GEO. POT. ANOMALY	OXY.	E(O)
0	9.26		32.613		25.23	274.6	0.000	6.51	
10	9.26		32.598		25.22	275.9	0.028	6.37	
20	9.27	0.00	32.610	0.000	25.23	275.3	0.056	6.23	0.00
30	9.26	0.00	32.608	0.001	25.23	275.5	0.083	6.30	0.00
50	9.26	0.00	32.610	0.002	25.23	275.7	0.138	6.34	0.01
75	9.31	0.02	32.642	0.005	25.25	274.5	0.207	6.19	0.01
100	9.10	0.08	33.190	0.017	25.72	230.4	0.370	4.75	0.19
150	7.66	0.01	33.842	0.002	26.44	162.5	0.368	3.20	0.10
200	7.16	0.01	33.962	0.010	26.60	147.6	0.446	2.55	0.05
250	6.76	0.02	33.986	0.006	26.67	141.1	0.518	2.30	0.03
300	6.34	0.03	34.015	0.009	26.75	134.2	0.587	1.96	0.04
400	5.62	0.01	34.065	0.001	26.88	122.6	0.715	1.28	0.00
500	5.16	0.03	34.147	0.002	27.00	112.1	0.833	0.79	0.00
600	4.76	---	34.231	---	27.12	102.1	0.940	0.47	---
700	4.31	---	34.300	---	27.23	91.9	1.037	0.33	---

STATION 280-033 OBSERVED VALUES

DATE 3/17/61		HR 14		LAT 45-54N		LONG 124-44W		SDG 219		WEA 02	
SECD1		BA 05		CL 6		AMT 8		WET 8.4		RELHU 93	
WVEL 13		DIR 16		SEA 3		DIR 4		SWL 4		WA 25.10	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	9	10.16	32.712	25.16	6.34	0.96		0.41	2.00	11.56
	3	10.16	32.712	25.16	6.34	0.88					
	6	10.16	32.712	25.16	6.37	0.87					
A	7										
	10	10.15	32.712	25.16	6.37	0.84			0.76	1.74	
	15	10.16	32.712	25.16	6.35	0.96					
	20	10.16	32.712	25.16	6.34	0.93					
A	24										
	25	10.15	32.706	25.16	6.35	0.91			0.36	1.60	
	30	10.16	32.708	25.16	6.34	0.83					
	40	10.14	32.716	25.17	6.35	0.88					
A	49										
	60	10.19	32.734	25.17	6.28	0.85			0.32	1.62	
	80	10.21	32.767	25.20	6.23	0.88					
	100	10.03	33.061	25.46	5.30	0.85					
	119	9.88	33.347	25.70	4.52	1.68					
	143	9.43	33.479	25.88	4.08	1.59					
	167	8.85	33.582	26.05	3.77	1.93					
	191	8.15	33.767	26.31	3.33	2.36					

STATION 280-033 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.16		32.712		25.16	281.2	0.000	6.34	
10	10.15		32.712		25.16	281.3	0.029	6.37	
20	10.16		32.712		25.16	281.6	0.057	6.34	
30	10.16		32.708		25.16	282.1	0.085	6.34	
50	10.16	0.01	32.724	0.001	25.17	281.3	0.141	6.32	0.01
75	10.22	0.01	32.746	0.008	25.18	281.1	0.212	6.28	0.03
100	10.03		33.061		25.46	255.3	0.279	5.30	
150	9.27	0.00	33.506	0.004	25.93	211.3	0.395	3.99	0.01

STATION 280-034 OBSERVED VALUES													
DATE	3/17/61	HR	18	LAT	45-57N	LONG	124-11W	SDG	95	WEA	02		
SECD	1	BA	11	CL	6	AMT	8	DRY	10.4	WET	9.3	RELHU	87
WVEL	8	DIR	20	SEA	3	DIR	20	SWL	4	DIR	24	WA	--
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
E	1	0	10.07	32.545	25.05	6.34	0.98	16	6.3	0.90	10.96		
A	1	3	10.06	32.542	25.05	6.35	0.94	10	6.1	0.89	7.96		
		4					1.56						
	1	6	10.06	32.543	25.05	6.33	0.93						
A	1	10	10.06	32.547	25.05	6.34	1.02						
		14					1.47						
	1	15	10.06	32.540	25.04	6.33	0.92	13	6.1	0.88	1.26		
	1	20	10.06	32.546	25.05	6.35	0.98						
A	1	25	10.06	32.550	25.05	6.29	0.92						
		27					1.61						
	1	30	10.06	32.544	25.05	6.32	0.91	14	6.1	0.89	0.08		
	1	40	10.04	32.543	25.05	6.35	0.88						
	1	60	10.05	32.550	25.05	6.35	0.88						
	1	80	10.04	32.561	25.06	6.30	0.89						

STATION 280-034 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.07		32.545		25.05	292.2	0.000	6.34	
10	10.06		32.547		25.05	292.1	0.030	6.34	
20	10.06		32.546		25.05	292.3	0.059	6.35	
30	10.06		32.544		25.05	292.7	0.088	6.32	
50	10.04	0.00	32.545	0.000	25.05	292.6	0.147	6.36	0.00
75	10.04	-.00	32.558	-.000	25.06	292.2	0.220	6.32	-.00

STATION 280-035 OBSERVED VALUES

DATE 3/17/61 HR 21 LAT 45-52N LONG 124-00W SDG 40 WEA 50
 SECDI BA 15 CL 6 AMT 7 DRY 11.0 WET 10.7 RELHU 94 VIS 7
 WVEL 8 DIR 20 SEA 2 DIR 20 SWL 1 DIR 1 WA 02

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.20	30.084	23.11	6.60	1.09		1.02	4.36	
A	1	1	10.22	30.068	23.10	6.85	1.12		0.38	4.37	
A	1	4	10.22	30.069	23.10		1.06		0.53	4.19	
A	1	8	10.20	30.071	23.10	6.75	1.09		0.78	2.81	
	15	10.16	30.664	23.57	6.60	1.12					
	20	10.14	31.330	24.09	6.40	1.11					
	25	10.18	31.536	24.24	6.40	1.04					
	30	10.21	31.658	24.33	6.34	1.04					

STATION 280-035 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.20		30.084		23.11	476.7	0.000	6.60	
10	10.20		30.071		23.10	477.8	0.048	6.75	
20	10.14		31.320		24.09	383.7	0.091	6.40	
30	10.21		31.658		24.33	360.7	0.129	6.34	

STATION 280-036 OBSERVED VALUES

DATE 3/17/61 HR 23 LAT 46-02N LONG 124-05W SDG 64 WEA 50
 SECD 1 BA 17 CL 6 AMT 8 DRY 10.6 WET 10.0 RELHU 94 VIS 4
 WVEL 3 DIR 23 SEA 2 DIR 23 SWL 1 DIR WA --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	10.30	30.887	23.72	6.51	0.99			0.48	2.97	
A 1	3	10.28	30.898	23.73	6.48	0.99			0.49	2.99	
1	6	10.21	31.072	23.88	6.48	0.99					
A 7	7								0.45	2.43	
1 10	10	10.20	31.335	24.08	6.38	1.02			0.32	1.88	
A 13	13										
1 15	15	10.20	31.543	24.25	6.40	0.99					
1 20	20	10.20	31.562	24.26	6.36	1.08					
1 25	25	10.20	31.585	24.28	6.35	1.00					
1 30	30	10.23	31.784	24.43	6.34	1.11					
1 40	40	10.19	32.050	24.64	6.29	0.98					
1 55	55	10.22	32.289	24.82	6.24	0.93					

STATION 280-036 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.30		30.887		23.72	418.7	0.000	6.51	
10	10.20		31.335		24.08	384.1	0.041	6.38	
20	10.20		31.562		24.26	367.4	0.078	6.36	
30	10.23		31.784		24.43	351.6	0.114	6.34	
50	10.20	----	32.231	-----	24.78	318.4	0.181	6.25	----

STATION 280-037 OBSERVED VALUES

DATE	3/18/61	HR	03	LAT	46-05N	LONG	124-32W	SDG	137	WEA	02
SECD	1	BA	20	CL	8	AMT	2	DRY	10.5	WET	9.0
WVEL	3	DIR	22	SEA	2	DIR	22	SWL	1	DIR	22
										WA	05.07
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	10.22	32.694	25.14	6.28	0.89			0.67	1.08	
	3	10.22	32.694	25.14	6.34	0.90					
P	1	10.23	32.694	25.14	6.34	0.89			0.23	1.16	
	10	10.22	32.694	25.14	6.34	0.97					
	15	10.18	32.694	25.14	6.34	1.24					
A	19								0.42	1.03	
	20	10.16	32.694	25.15	6.02	1.09					
	25	10.16	32.694	25.15	6.33	1.02					
	30	10.16	32.694	25.15	6.35	1.04					
P	2	10.15	32.702	25.16	6.30	0.92			0.45	1.09	
	55	10.17	32.708	25.16	6.28	0.93					
	74	10.20	32.725	25.17	6.30	0.94					
	92	10.26	32.815	25.23	6.08	1.01					
	116	9.54	33.359	25.77	4.35	0.78					

STATION 280-037 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.22		32.694		25.14	283.5	0.000	6.28	
10	10.22		32.694		25.14	283.7	0.029	6.34	
20	10.16		32.694		25.15	283.0	0.057	6.02	
30	10.16		32.694		25.15	283.2	0.086	6.35	
M	50	10.17	32.704	0.000	25.15	282.9	0.142	6.30	0.01
	75	10.21	32.725	0.002	25.16	282.5	0.213	6.30	0.01
	100	10.12	32.942	0.000	25.35	265.5	0.281	5.69	0.01

STATION 280-038 OBSERVED VALUES													
DATE	3/18/61	HR	07	LAT	46-12N	LONG	124-49W	SDG	732	WEA	00		
SECD1	BA	22	CL	AMT	DRY	9.7	WET	8.1	RELHU	80	VIS	7	
WVEL	5	DIR	18	SEA	1	DIR	18	SWL	1	DIR	22	WA	30, 20, 18
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P A	3	0	10.20	32.690	25.14	6.36	1.07	10	6.4	0.38	0.88		
	3	7								0.30	1.06		
P	3	8	10.20	32.690	25.14	6.34	1.08	12	6.3				
	3	16	10.14	32.690	25.15	6.37	1.04	14	6.2				
	3	24	10.09	32.690	25.16	6.36	1.04	10	4.9	0.70	0.92		
P	3	32	10.06	32.690	25.16	6.36	1.13	13	7.4				
	3	49	10.04	32.690	25.17	6.28	1.13	14	7.7	0.33	0.80		
	3	66	10.02	32.730	25.20	6.25	1.10	10	8.4				
3	3	82	9.50	32.764	25.31	5.99	1.21	15	16.6				
	3	114	9.08	33.458	25.92	4.19	1.85	31	23.2				
	3	137	8.37	33.573	26.12	3.82	2.07	32	25.6				
1	1	147	7.95	33.749	26.32	3.29	2.38	19	27.7				
	3	160	8.14	33.732	26.28	3.38	1.98	39	27.4				
1	1	228	7.19	33.917	26.56	2.63	2.47	52	31.6				
	2	410	5.72	34.058	26.87	0.73	2.97	95	42.5				
	1	609	4.92	34.183	27.06	1.41	3.39	109	38.6				

		STATION 280-039		OBSERVED VALUES									
DATE	3/18/61	HR	13	LAT	46-12N	LONG	125-08W	SDG	1470	WEA	00		
SECDI	BA 21	CL		AMT	9	DRY	9.7	WET	8.6	RELHU	87	VIS	6
WVEL	9	DIR	18	SEA	1	DIR	18	SWL	1	DIR	18	WA	08, 08, 04
CAST	DEPTH	TEMP.		SAL.		SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
3	0	9.92		32.675		25.17	6.37	0.91					
3	10	9.92		32.675		25.17	6.38	0.93					
3	20	9.90		32.675		25.18	6.38	0.98					
3	30	9.78		32.681		25.20	6.36	0.90					
3	40	9.50		32.636		25.21	6.41	1.09					
3	60	9.40		32.630		25.22	6.43	1.07					
3	80	9.46		32.653		25.23	6.37	1.02					
3	100	8.62		33.470		26.00	6.37	1.93					
3	125	8.20		33.708		26.25	3.46	2.18					
3	150	7.98		33.829		26.38	3.08	2.31					
3	175	7.64		33.882		26.47	2.96	2.37					
1	193	7.58		33.884		26.48	2.91	2.36					
1	290	6.24		34.003		26.76	1.91	2.41					
1	484	5.16		34.143		27.00	0.72	2.86					
2	740	4.30		34.287		27.21	0.31	3.28					
2	1036	3.52		34.423		27.40	0.41	3.49					

STATION 280-039 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.92		32.675		25.17	280.2	0.000	6.37	
10	9.92		32.675		25.17	280.4	0.029	6.38	
20	9.90		32.675		25.18	280.2	0.057	6.38	
30	9.78		32.681		25.20	278.1	0.084	6.36	
50	9.40	0.02	32.624	0.003	25.22	276.8	0.140	6.43	0.00
75	9.48	0.03	32.609	0.024	25.19	279.6	0.210	6.39	0.00
100	8.62		33.460		26.00	203.2	0.270	6.37	
150	7.98		33.829		26.38	168.1	0.363	3.08	
200	7.30	0.01	33.918	0.005	26.55	152.8	0.443	2.76	0.03
250	6.68	0.01	33.974	0.007	26.68	141.0	0.516	2.31	0.04
300	6.15	0.01	34.012	0.001	26.77	132.0	0.585	1.83	0.00
400	5.47	0.07	34.092	0.004	26.92	118.8	0.710	1.12	0.01
500	5.09	0.00	34.153	0.000	27.02	110.8	0.825	0.67	0.01
600	4.72	0.02	34.213	0.001	27.11	102.9	0.932	0.42	0.04
700	4.41	0.01	34.267	0.000	27.18	96.2	1.031	0.32	0.02
800	4.12	----	34.317	----	27.25	90.0	1.124	0.28	----
1000	3.60	----	34.408	----	27.38	78.9	1.293	0.36	----

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STATION 280-040 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.78		32.632		25.16	281.2	0.000	6.41	
10	9.76		32.632		25.17	281.0	0.029	6.65	
20	9.75	0.00	32.632		25.17	281.0	0.057	6.50	0.00
30	9.72	0.00	32.632	0.000	25.17	280.7	0.085	6.45	0.00
50	9.66	0.00	32.620	0.000	25.18	280.4	0.141	6.39	0.01
75	9.51		32.621		25.20	279.2	0.211	6.38	
100	9.56	0.04	33.142	0.009	25.60	241.8	0.276	4.97	0.02
150	8.57	0.02	33.637	0.004	26.14	191.0	0.384	3.62	0.01
200	7.51	0.01	33.880	0.011	26.49	158.4	0.472	2.83	0.04
250	6.82	0.05	33.963	0.014	26.65	143.6	0.547	2.39	0.00
300	6.32	0.07	34.017	0.019	26.76	133.8	0.616	1.94	0.01
400	5.67	0.01	34.072	0.000	26.88	122.7	0.745	1.23	0.01
500	5.12	0.02	34.146	0.000	27.01	111.6	0.862	0.77	0.02
600	4.69	---	34.211	---	27.11	102.7	0.969	0.49	---
700	4.33	---	34.260	---	27.19	95.1	1.068	0.31	---
800	4.07	---	34.321	---	27.26	89.1	1.160	0.28	---

STATION 280-041														OBSERVED VALUES													
DATE		3/18/61		HR		22		LAT		46-22N		LONG		124-24W		SDG		91		WEA		02					
SECD1		BA		19		CL		4		AMT		8		DRY		12.3		WET		11.5		RELHU		94			
WVEL		6		DIR		15		SEA		1		DIR		15		SWL		1		DIR		18		WA		15	
CAST	DEPTH	TEMP.		SAL.		SIGMA-T		OXY.		PHOS.		SIL.		NITR.		CHL-A		PROD-I		PROD-S							
P A	1	0	10.12	31.342	24.10	6.48	1.09					0.30	1.91														
	2											0.32	1.77														
	3	10.06	31.643	24.35	6.44	1.02																					
A	1	6	10.03	32.395	24.94	6.38	0.90					0.22	1.16														
	7																										
	10	10.04	32.500	25.02	6.34	0.88																					
P	1	14	10.06	32.538	25.04	6.30	1.05					0.26	0.86														
	19	10.06	32.557	25.06	6.29	0.97																					
	24	10.05	32.557	25.06	6.28	0.86																					
1	29	10.04	32.557	25.06	6.28	0.88																					
	39	10.04	32.557	25.06	6.22	0.82																					
	58	10.04	32.571	25.07	6.22	0.77																					
	77	10.02	32.590	25.09	6.22	0.93																					

STATION 280-041 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
10	10.12		31.342		24.10	282.1	0.000	6.48					
20	10.06	0.00	32.496		25.02	285.2	0.034	6.34					
30	10.04	0.00	32.558	0.001	25.06	291.4	0.064	6.29	0.00				
			32.557	0.000	25.06	291.4	0.093	6.27	0.00				
50	10.04	0.00	32.564	0.001	25.07	291.3	0.151	6.20	0.00				
75	10.02	---	32.588	---	25.09	289.7	0.224						

STATION 280-042 OBSERVED VALUES													
DATE	3/19/61	HR	02	LAT	46-21N	LONG	124-12W	SDG	37	WEA	02		
SECDI	BA 17	CL	4	AMT	8	DRY	12.8	WET	11.5	RELHU	94	VIS	7
WVEL	5	DIR	22	SEA	1	DIR	22	SWL	1	DIR	18	WA	20
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P 1	0	9.72	23.353	17.96	7.03	1.08			0.64	2.88			
A 1	1								0.66	3.06			
	3	9.52	24.311	18.73	6.91	1.07							
A 1	4												
	6	9.90	28.745	22.12	6.54	1.12			0.30	2.73			
A 1	8												
	9	10.04	30.428	23.41	6.48	1.01			0.36	2.09			
	14	10.08	31.049	23.88	6.40	1.08							
1	19	10.12	31.478	24.21	6.37	1.02							
1	23	10.15	31.603	24.30	6.36	1.10							
1	28	10.17	31.680	24.36	6.32	1.16							

STATION 280-042 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.72		23.353		17.96	971.3	0.000	7.03	
10	10.06	0.01	30.669	0.068	23.59	431.2	0.071	6.46	0.00
20	10.13	0.00	31.521	0.004	24.24	369.3	0.111	6.37	0.00

STATION 280-043 OBSERVED VALUES

DATE 3/19/61 HR 03 LAT 46-11N LONG 124-09W SDG 42 WEA 02
 SECDI BA 17 CL 6 AMT 8 DRY 11.1 WET 9.4 RELHU 87 VIS 7
 WVEL 8 DIR 18 SEA 1 DIR 18 SWL 1 DIR WA 07

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.29	30.744	23.61	6.70	1.00	19	6.8	0.40	1.43	
A	1	1								0.56	1.43	
		3	10.27	30.769	23.63	6.70	0.95	23	6.6			
A	1	4										
		6	10.26	30.998	23.81	6.52	0.98	18	6.5	0.41	1.53	
A	1	8										
		10	10.18	31.096	23.90	6.50	1.00	16	6.6	0.48	1.85	
		15	10.18	31.157	23.95	6.40	0.96	21	6.6			
		20	10.18	31.228	24.00	6.43	0.96	17	6.6			
		25	10.20	31.370	24.11	6.44	1.01	14	6.5			
		30	10.20	31.406	24.14	6.41	1.00	19	6.6			
		40	10.20	31.854	24.49	6.33	1.67	16	6.6			

STATION 280-043 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.29		30.744		23.61	429.1	0.000	6.70	
10	10.18		31.096		23.90	401.5	0.042	6.50	
20	10.18		31.228		24.00	391.9	0.082	6.43	
30	10.20		31.406		24.14	379.2	0.120	6.41	

STATION 280-044 OBSERVED VALUES

DATE 3/19/61 HR 05 LAT 46-15N LONG 124-11W SDG 50 WEA 00
 SECDI BA 16 CL X AMT 9 DRY 10.4 WET 8.7 RELHU 81 VIS 7
 WVEL 6 DIR 18 SEA 1 DIR 18 SWL 1 DIR 18 WA 40

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	9.36	22.083	17.02	7.03	1.44			0.68	1.30	
P 1	2	9.96	25.923	19.92	7.03	1.36			0.67	0.49	
A 1	4										
P 1	5	10.22	29.693	22.81	6.70	1.22			0.49	1.38	
	8	10.21	31.209	23.98	6.51	1.08			0.59	1.15	
	11	10.24	31.643	24.32	6.51	1.07					
	15	10.24	31.853	24.48	6.43	1.07					
	19	10.24	31.918	24.53	6.38	0.98					
	23	10.21	31.924	24.54	6.36	1.07					
	31	10.20	32.063	24.65	6.36	0.99					

STATION 280-044 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.36		22.083		17.02	1061.8	0.000	7.03	
10	10.23	0.00	31.572	0.031	24.26	367.0	0.072	6.50	0.01
20	10.23	0.00	31.920	0.003	24.53	341.4	0.107	6.37	0.00
30	10.20	---	32.036	---	24.63	332.4	0.141	6.36	---

STATION 280-044D OBSERVED VALUES

DATE 3/19/61 HR 14 LAT 46-50N LONG 124-20W SDG RELHU WEA
 SECDI BA CL AMT DRY 124-20W WET VIS
 WVEL DIR SEA DIR SWL DIR WA

DEPTH	CHL-A	PROD-I	PROD-S
0	0.52	1.71	9.40

STATION 280-045 OBSERVED VALUES

DATE 3/19/61 HR 19 LAT 46-35N LONG 124-10W SDG 27 WEA 61
 SECD1 BA 05 CL AMT DRY 10.7 WET 9.5 RELHU 81 VIS 6
 WVEL 10 DIR 12 SEA 2 DIR 12 SWL 2 DIR 27 WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	9.64	23.523	18.10	7.00				0.90	5.29	23.10
A	1								0.78	4.96	8.16
P 1	3	9.64	23.555	18.13	6.98						
A	5										
	6	9.72	25.351	19.51	6.84				0.80	4.98	1.72
									0.83	3.88	0.06
	10	9.82	26.077	20.06	6.87						
	15	9.98	30.064	23.13	6.45						
	20	10.06	31.580	24.30	6.38						

STATION 280-045 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.64		23.523		18.10	957.5	0.000	7.00	
10	9.82		26.077		20.06	769.2	0.087	6.87	
20	10.06		31.580		24.30	363.9	0.143	6.38	

STATION 280-046 OBSERVED VALUES

DATE 3/19/61 HR 21 LAT 46-45N LONG 124-14W SDG 40 WEA 61
 SECD1 BA 02 CL AMT 8 DRY 9.1 WET 8.9 RELHU 99 VIS 6
 WVEL 13 DIR 13 SEA 2 DIR 13 SWL 2 DIR 27 WA 22.30

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	9.94	27.681	21.29	6.64	1.47			0.28	3.75	
A 1	1								0.33	3.58	
	3	9.91	27.733	21.33	6.66	1.51					
A 1	4										
	6	9.94	27.783	21.37	6.26	1.14			0.39	3.43	
A 1	8								0.30	3.55	
	9	9.92	27.765	21.36	6.32	1.51					
	14	9.98	28.949	22.27	5.06	1.10					
1	19	10.02	30.331	23.33	6.28	1.07					
1	23	10.04	30.811	23.70	6.40	1.03					
2	26	10.08	31.880	24.53	6.28	1.17					

STATION 280-046 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.94		27.681		21.29	651.3	0.000	6.64	
10	9.93	0.00	27.933	0.035	21.49	632.5	0.065	6.04	0.11
20	10.02	0.00	30.426	0.051	23.41	448.8	0.119	6.36	0.01

STATION 280-047 OBSERVED VALUES

DATE 3/20/61 HR 00 LAT 46-44N LONG 124-31W SDG 101 WEA 21
 SECD1 BA 00 CL 7 AMT 6 DRY 10.5 WET 9.6 RELHU 93 VIS 6
 WVEL 16 DIR 13 SEA 3 DIR 13 SWL 2 DIR WA 18

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.94	32.473	25.01	6.37	0.92			0.54	2.07	
A	3	9.92	32.473	25.02	6.35	1.43				2.59	
	4										
	6	9.94	32.473	25.01	6.35	0.96					
	9	9.92	32.473	25.02	6.37	0.98					
P	14	9.94	32.473	25.01	6.38	1.07			0.56	2.14	
	19	9.92	32.479	25.02	6.38	0.99					
	24	9.93	32.480	25.02	6.38	0.94					
A	27	9.94	32.494	25.03	6.38	1.02			0.45	2.29	
	29										
	38	9.94	32.531	25.06	6.38	0.91					
	57	9.90	32.603	25.12	6.20	0.96					
	76	9.87	32.608	25.13	6.23	1.02					

STATION 280-047 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.94	0.00	32.473	0.000	25.01	295.5	0.000	6.37	0.00
10	9.92	0.00	32.473	0.000	25.02	295.4	0.030	6.37	0.00
20	9.92	0.00	32.479	0.000	25.02	295.1	0.060	6.38	0.00
30	9.94	0.00	32.498	0.000	25.03	294.2	0.089	6.38	0.00
50	9.92	0.00	32.581	0.002	25.10	288.0	0.147	6.27	0.02
75	9.87	0.00	32.609	0.000	25.13	285.7	0.219	6.22	0.02

STATION 280-048										OBSERVED VALUES									
DATE		3/20/61		HR 18		LAT 46-47N		LONG 125-30W		SDG 1829		WEA 02							
SECDI		BA 20		CL 8		AMT 4		DRY 8.4		WET 7.5		RELHU 93		VIS 7					
WVEL		9 DIR 29		SEA 2		DIR 29		SWL 3		DIR		WA 12.13.20							
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S								
P	3	0	9.68	32.685	25.22	6.41	0.91		0.68	1.34									
A	3	7							0.34										
	3	9	9.68	32.685	25.22	6.44	0.93												
	3	19	9.68	32.685	25.22	6.42	0.92												
A	3	24																	
	3	29	9.68	32.694	25.23	6.41	0.90		0.27	1.59									
	3	38	9.68	32.680	25.22	6.41	0.98												
		48																	
A	3	57	9.68	32.682	25.22	6.43	0.93		0.45	1.41									
	3	77	9.68	32.687	25.22	6.37	0.91												
	3	96	9.58	33.028	25.50	5.41	1.34												
	3	121	8.52	33.599	26.12	3.51	2.06												
	3	145	7.90	33.716	26.30	3.01	2.14												
	3	169	7.42	33.858	26.48	2.87	2.41												
	1	196	7.38	33.884	26.51	2.84	2.23												
		294	6.35	34.015	26.75	1.75	2.52												
1	1	490	5.06	34.134	27.00	0.77	2.99												
1	1	735	4.14	34.297	27.23	0.34	3.34												
2	2	1018	3.51	34.423	27.40	0.38	3.38												
	2	1566	2.44	34.554	27.60	0.66	3.88												

STATION 280-048 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.68	0.00	32.685	0.000	25.22	275.7	0.000	6.41	0.00
10	9.68	0.00	32.685	0.000	25.22	275.9	0.028	6.44	0.00
20	9.68	0.00	32.686	0.001	25.22	276.0	0.056	6.42	0.00
30	9.68	0.00	32.693	0.001	25.23	275.7	0.083	6.41	0.00
50	9.68	0.00	32.679	0.002	25.22	277.1	0.139	6.43	0.00
75	9.68	0.00	32.678	0.005	25.21	277.6	0.208	6.40	0.01
100	9.43	0.03	33.130	0.013	25.61	240.7	0.273	5.08	0.05
150	7.78	0.01	33.749	0.004	26.35	171.2	0.376	2.96	0.01
200	7.13	0.13	33.939	0.033	26.59	148.9	0.456	2.72	0.04
250	6.62	0.11	34.017	0.036	26.72	137.0	0.527	2.20	0.01
300	6.30	0.00	34.010	0.001	26.76	133.3	0.595	1.70	0.01
400	5.56	0.02	34.091	0.008	26.91	120.0	0.721	1.09	0.04
500	5.01	0.00	34.141	0.000	27.02	110.7	0.837	0.74	0.00
600	4.58	0.02	34.209	0.003	27.12	101.5	0.943	0.50	0.02
700	4.24	0.01	34.275	0.001	27.21	93.6	1.040	0.36	0.01
800	3.97	0.01	34.331	0.001	27.28	87.3	1.131	0.32	0.01
1000	3.54	0.00	34.417	0.000	27.39	77.6	1.296	0.37	0.01
1200	3.13	0.00	34.483	0.000	27.48	69.3	1.442	0.44	0.01
1500	2.56	0.00	34.546	0.000	27.58	59.8	1.636	0.61	0.01

STATION 280-048D OBSERVED VALUES

DATE 3/20/61 HR 15 LAT 46-47N LONG 125-30W SDG 1829 WEA 04
 SECD1 BA 20 CL 8 AMT 4 DRY 8.4 WET 7.5 RELHU 93 VIS 7
 WVEL 9 DIR 29 SEA 2 DIR 29 SWL 3 DIR 7 WA

DEPTH
 0
 A CHL-A PROD-I PROD-S
 0.22 8.86

STATION 280-049				OBSERVED VALUES									
DATE SECD1 WVEL	3/20/61 BA 22 5 DIR	HR 20 CL 8 SEA 2	LAT 46-55N AMT 4 DIR 27	LONG 125-13W WET SWL 1	SDG 1051 RELHU WA 24.10	WEA 02 VIS 7							
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P A	0	9.88	32.637	25.15	6.37	1.04			0.43	1.16	9.08		
	10	9.84	32.637	25.16	6.33	0.96			0.29	1.31	7.64		
A	20	9.84	32.642	25.16	6.35	0.93							
	30	9.80	32.642	25.17	6.29	0.93			0.33	1.09	1.86		
A	40	9.80	32.642	25.17	6.32	0.95							
	48	9.78	32.642	25.17	6.34	0.93			0.36	0.99	0.24		
	60	9.79	32.660	25.18	6.24	0.88							
	99	9.50	33.103	25.58	5.07	1.47							
	124	8.71	33.507	26.02	4.08	1.69							
	149	8.16	33.747	26.29	3.25	2.11							
	174	7.65	33.842	26.44	2.76	2.19							
	188	7.54	33.868	26.47	2.67	2.22							
	282	6.76	33.978	26.67	2.26	2.41							
	471	5.36	34.106	26.95	0.86	2.83							
1	707	4.39	34.153	27.09	0.75	3.27							

STATION 280-049 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.88		32.637		25.15	282.4	0.000	6.37	
10	9.84		32.637		25.16	281.9	0.029	6.33	
20	9.84		32.642		25.16	281.7	0.057	6.35	
30	9.80		32.642		25.17	281.3	0.085	6.29	
50	9.79	0.00	32.641	0.001	25.17	281.6	0.141	6.34	0.00
75	9.80	0.01	32.633	0.014	25.16	282.8	0.212	6.33	0.03
100	9.47	0.00	33.123	0.000	25.60	241.9	0.277	5.02	0.00
150	8.14	0.00	33.753	0.001	26.30	176.0	0.382	3.22	0.00
200	7.34	0.06	33.897	0.012	26.53	154.8	0.465	2.53	0.09
250	6.91	0.07	33.963	0.014	26.64	144.9	0.540	2.28	0.10
300	6.61	0.00	33.995	0.001	26.70	139.3	0.611	2.12	0.03
400	5.84	0.01	34.060	0.002	26.86	125.0	0.743	1.36	0.08
500	5.19	---	34.119	---	26.98	114.6	0.863	0.75	---
600	4.72	---	34.147	---	27.05	107.8	0.974	0.57	---
700	4.41	---	34.153	---	27.09	104.6	1.080	0.73	---

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STATION 280-050 OBSERVED VALUES													
DATE	3/21/61	HR	02	LAT	46-43N	LONG	124-49W	SDG	219	WEA	03		
SECDI	BA 23	CL	8	AMT	5	DRY	8.9	WET	7.7	RELHU	86	VIS	
WVEL	3	DIR	24	SEA	2	DIR	24	SWL	1	DIR	WA	10.03	03
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	10.04	32.592	25.09	6.34	0.98		0.22	0.78			
	2	3	10.06	32.592	25.09	6.35	0.99						
	2	6	10.05	32.592	25.09	6.36	0.97						
A	2	7	10.04	32.592	25.09	6.36	0.92		0.27	0.97			
	2	10	10.06	32.594	25.09	6.36	1.00						
	2	20	10.00	32.613	25.11	6.40	1.00						
A	2	22							0.29	1.62			
	2	25	10.00	32.652	25.14	6.37	0.88						
	2	30	9.99	32.668	25.16	6.41	0.92						
	2	40	9.97	32.673	25.16	6.41	0.88						
A	2	43							0.40	1.35			
	2	60	9.96	32.667	25.16	6.35	0.84						
	3	80	9.94	32.667	25.16	6.34	0.92						
	3	100	9.81	32.747	25.25	5.95	1.17						
	1	122	9.36	33.149	25.63	4.75	1.61						
	1	146	8.50	33.546	26.08	3.71	2.25						
	1	170	7.96	33.737	26.31	3.26	2.25						
	1	195	7.48	33.849	26.47	1.72	2.48						

STATION 280-050 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.04		32.592		25.09	288.2	0.000	6.34	
10	10.04		32.592		25.09	288.4	0.029	6.36	
20	10.00		32.613		25.11	286.4	0.058	6.40	
30	9.99		32.668		25.16	282.4	0.087	6.41	
50	9.96	0.00	32.671	0.001	25.16	282.1	0.143	6.38	0.01
75	9.95	0.00	32.663	0.002	25.16	283.0	0.214	6.36	0.01
100	9.81		32.747		25.25	275.0	0.283	5.95	
150	8.40	0.01	33.588	0.003	26.13	192.0	0.400	3.65	0.04

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STATION 280-051 OBSERVED VALUES									
DATE	3/21/61	HR	04	LAT	46-56N	LONG	124-41W	SDG	109
SECD1	BA	23	CL	8	AMT	3	DRY	9.2	WET
WVEL	DIR	00	SEA	2	DIR	SWL	1	DIR	WA
									03
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
P	1	9.94	32.608	25.12	6.34	1.00			0.51
	3	9.96	32.608	25.11	6.40	1.07			1.24
	6	9.95	32.608	25.12	6.36	1.07			
A	7								0.28
	10	9.90	32.601	25.12	6.35	0.97			1.29
	15	9.86	32.608	25.13	6.32	1.26			
	20	9.85	32.608	25.13	6.32	1.05			
A	22								0.48
	25	9.84	32.608	25.13	6.31	0.97			1.35
	30	9.85	32.609	25.13	6.31	1.02			
	40	9.84	32.612	25.14	6.32	0.97			
A	43								0.39
	60	9.84	32.615	25.14	6.31	0.97			1.34
	80	9.86	32.632	25.15	6.27	1.05			

STATION 280-051 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.94		32.608		25.12	285.5	0.000	6.34	
10	9.90		32.601		25.12	285.5	0.029	6.35	
20	9.85		32.608		25.13	284.4	0.058	6.32	
30	9.85		32.609		25.13	284.5	0.086	6.31	
50	9.84	0.00	32.613	0.001	25.14	284.4	0.143	6.32	0.00
75	9.85	---	32.626	---	25.15	284.1	0.214	6.28	---

STATION 280-052 OBSERVED VALUES

DATE 3/21/61 HR 07 LAT 46-57N LONG 124-15W SDG 24 WEA 02
 SECD1 BA 23 CL AMT 9 DRY 7.3 WET 6.2 RELHU 86 VIS 7
 WVEL 5 DIR 09 SEA 1 DIR 09 SWL 1 DIR WA 26

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	9.46	21.847	16.83	6.97				0.82	2.45	
A 1	1								0.82	2.97	
	3	9.76	25.078	19.29	7.05						
A 4	4								0.44	2.92	
A 1	5	9.84	26.523	20.40	7.04				0.68	2.11	
A 1	8	9.89	28.650	22.05	6.47						
	10										
1	15	9.95	30.026	23.11	6.53						
1	20	9.98	30.595	23.55	6.28						

STATION 280-052 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.46		21.847		16.83	1080.8	0.000	6.97	
10	9.89		28.650		22.05	578.6	0.083	6.47	
20	9.98		30.595		23.55	435.7	0.134	6.28	

STATION 280-052D OBSERVED VALUES

DATE 3/21/61 HR 15 LAT 47-12N LONG 125-11W SDG WEA
 SECD1 BA CL AMT DRY 125-11W RELHU VIS
 WVEL DIR SEA DIR SWL DIR WA

DEPTH	CHL-A	PROD-I	PROD-S
0	0.02	0.69	5.46

STATION 280-053 OBSERVED VALUES

DATE	3/21/61	HR	09	LAT	47-06N	LONG	124-19W	SDG	31	WEA	02
SECDI	BA	22	CL	AMT	9	DRY	WET	RELHU		VIS	7
WVEL	5	DIR	09	SEA	1	DIR	09	SWL	1	DIR	WA
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.68	25.952	19.98	7.01		38	7.4			
1	3	9.74	26.241	20.20	7.01		50	9.1			
1	6	9.78	27.411	21.10	6.75		28	5.3			
1	10	9.82	28.289	21.78	6.62		25	6.0			
1	15	9.90	30.926	23.82	6.60	1.00	19	6.4			
1	20	9.94	31.755	24.45	6.40	1.08	18	6.5			
1	25	9.94	31.954	24.61	6.33	1.09	14	6.6			
1	30	9.94	31.985	24.63	6.31	1.03	14	6.8			

STATION 280-053 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL.	GEOPOT.	ANOMALY	OXY.	E(O)
0	9.68		25.952		19.98	776.4	0.000		7.01	
10	9.82		28.289		21.78	604.4	0.070		6.62	
20	9.94		31.755		24.45	349.0	0.117		6.40	
30	9.94		31.985		24.63	332.2	0.151		6.31	

STATION 280-054 OBSERVED VALUES															
DATE	3/21/61	HR	10	LAT	47-07N	LONG	124-35W	SDG	73	WEA	02				
SECD	1	BA	22	CL	9	DRY	8.7	WET	6.8	RELHU	79				
WVEL	4	DIR	09	SEA	1	DIR	09	SWL	1	DIR	02				
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S				
1	0	9.78	32.533	25.09	6.27	0.97									
1	3	9.78	32.524	25.08	6.22	1.02									
1	6	9.78	32.539	25.09	6.05	0.98									
1	10	9.78	32.531	25.08	6.06	0.98									
1	15	9.80	32.525	25.08	6.29	1.00									
1	20	9.78	32.538	25.09	6.31	0.97									
1	25	9.78	32.542	25.09	6.31	0.99									
1	30	9.78	32.536	25.09	6.85	0.97									
1	40	9.78	32.551	25.10	6.32	0.98									
1	60	9.75	32.548	25.10	6.29	0.91									

STATION 280-054 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.78		32.533		25.09	288.5	0.000	6.27	
10	9.78		32.531		25.08	288.8	0.029	6.06	
20	9.78		32.538		25.09	288.5	0.058	6.31	
30	9.78		32.536		25.09	288.8	0.087	6.85	
50	9.77	-.---	32.555	-.---	25.10	287.6	0.145	6.13	-.---

STATION 280-055										OBSERVED VALUES									
DATE	3/21/61	HR	13	LAT	47-10N	LONG	124-57W	SDG	200	WEA	00								
SECD	1	BA	20	CL	AMT	9	DRY	8.4	WET	7.3	RELHU	86	VIS	7					
WVEL	4	DIR	09	SEA	1	DIR	09	SWL	1	DIR	WA	12							
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S								
1	0	9.75	32.631	25.17	6.38	0.93													
1	3	9.76	32.638	25.17	6.37	0.98													
1	6	9.76	32.634	25.17	6.36	0.98													
1	10	9.76	32.636	25.17	6.37	1.02													
1	15	9.78	32.636	25.17	6.37	1.08													
1	20	9.75	32.639	25.17	6.37	1.02													
1	24	9.72	32.636	25.18	6.36	0.98													
1	29	9.70	32.642	25.18	6.36	1.07													
1	39	9.68	32.641	25.19	6.34	0.95													
1	58	9.62	32.647	25.20	6.36	0.96													
1	78	9.59	32.648	25.21	6.34	0.99													
1	98	9.55	32.648	25.21	6.32	0.97													
1	122	9.47	33.248	25.69	4.63	1.64													
1	146	8.68	33.578	26.08	3.77	2.03													
1	170	8.49	33.637	26.15	3.56	2.26													

STATION 280-055 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP. VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.75		32.631		25.17	280.8	0.000	6.38	
10	9.76		32.636		25.17	280.7	0.029	6.37	
20	9.75		32.639		25.17	280.5	0.057	6.37	
30	9.70	0.00	32.642	0.000	25.18	279.7	0.085	6.36	0.00
50	9.65	0.00	32.644	0.001	25.19	279.1	0.141	6.35	0.00
75	9.59	0.00	32.648	0.000	25.21	278.5	0.210	6.34	0.00
100	9.56	0.01	32.691	0.012	25.24	275.2	0.279	6.20	0.03
150	8.61	---	33.607	---	26.11	193.8	0.397	3.69	---

STATION 280-056 OBSERVED VALUES													
DATE	3/21/61	HR	17	LAT	47-12N	LONG	125-20W	SDG	1225	WEA	02		
SECDI	BA	19	CL	4	AMT	7	DRY	8.1	WET	6.7	RELHU	79	VIS
WVEL	7	DIR	09	SEA	2	DIR	09	SWL	1	DIR	27	WA	12, 05
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	9.84	32.625	25.15	6.45	0.82		0.91	1.35			
A	2	10	9.84	32.626	25.15	6.32	0.93		0.31	1.24			
	2	20	9.85	32.622	25.14	6.32	0.89						
A	2	24	9.84	32.627	25.15	6.33	0.91		0.31	1.28			
2	2	30	9.82	32.645	25.17	6.27	0.99						
	2	40											
A	2	49	9.68	32.687	25.22	6.36	0.93		0.48	1.15			
2	2	59	9.59	32.694	25.24	6.34	0.94						
2	2	99	9.30	32.755	25.34	6.04	1.10						
	2	124	8.72	33.523	26.03	3.82	1.89						
2	2	148	8.28	33.707	26.24	3.32	2.13						
2	2	173	7.72	33.856	26.44	2.89	2.37						
1	1	194	7.47	33.892	26.50	2.74	2.41						
	1	292	6.67	33.985	26.69	2.14	2.65						
1	1	486	5.46	34.092	26.92	1.03	3.10						
1	1	727	4.27	34.269	27.20	0.54	3.37						
1	1	1018	3.45	34.383	27.37	0.44	3.51						

STATION 280-056 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.84		32.625		25.15	282.6	0.000	6.45	
10	9.84		32.626		25.15	282.7	0.029	6.32	
20	9.85		32.622		25.14	283.4	0.057	6.32	
30	9.84		32.627		25.15	283.0	0.085	6.33	
50	9.75	0.01	32.669	0.002	25.20	278.9	0.142	6.31	0.02
75	9.61	0.01	32.692	0.002	25.24	275.5	0.211	6.36	0.00
100	9.28	0.00	32.784	0.009	25.36	264.0	0.278	5.95	0.02
150	8.23	0.00	33.722	0.001	26.26	179.7	0.389	3.28	0.00
200	7.41	0.00	33.890	0.001	26.52	155.6	0.473	2.70	0.00
250	6.97	0.02	33.954	0.004	26.62	146.3	0.549	2.39	0.01
300	6.61	0.00	33.990	0.001	26.70	139.6	0.620	2.09	0.00
400	5.95	0.01	34.049	0.006	26.83	128.0	0.754	1.48	0.02
500	5.38	0.00	34.103	0.001	26.94	118.0	0.877	0.98	0.01
600	4.85	0.00	34.177	0.005	27.06	107.1	0.989	0.71	0.03
700	4.38	0.00	34.240	0.002	27.17	97.2	1.092	0.56	0.01
800	4.00	---	34.308	---	27.26	89.3	1.185	0.46	---
1000	3.48	---	34.379	---	27.37	79.6	1.354	0.43	---

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STATION 280-057 OBSERVED VALUES													
DATE	3/21/61	HR	20	LAT	47-17N	LONG	125-49W	SDG	1737	WEA	02		
SECDI	BA	18	CL	2	AMT	6	DRY	8.4	WET	6.9	RELHU	79	VIS
WVEL	DIR	SEA	DIR	SEA	DIR	SEA	DIR	SEA	DIR	SEA	DIR	SEA	DIR
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
E	1	0	9.18	32.569	25.21	6.16	0.96	15	7.3	0.25	1.41	12.84	
A	1	8	9.16	32.568	25.21	6.37	1.20	11	7.5	0.39	1.49	8.96	
		10					1.00						
A	1	19	9.16	32.591	25.23	6.36	1.01						
		27					1.14						
A	1	29	9.15	32.588	25.23	6.44	1.00	12	7.6	0.44	1.39	2.08	
		39	9.13	32.571	25.22	6.42	0.99						
A	1	53					1.16	16	7.7	0.32	0.92	0.10	
		58	9.12	32.580	25.23	6.41	1.02						
		77	9.16	32.701	25.32	6.15	0.99						
		97	9.16	33.061	25.60	5.13	1.51						
		122	8.56	33.588	26.10		1.93						
		146	8.10	33.704	26.26		2.24						
2		151	7.88	33.836	26.40	3.82	2.20						
1		171	7.78	33.820	26.40	3.51	2.32						
		232	6.95	33.995	26.66		2.46						
2		355	5.96	34.065	26.84	3.12	2.81						
3		537	4.86	34.179	27.06	2.36	3.09						
4		777	3.97	34.338	27.28	1.53	3.35						
						0.72							

STATION 280-057			INTERPOLATED AND COMPUTED VALUES						
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.18		32.569		25.21	276.7	0.000	6.16	
10	9.16		32.568		25.21	276.6	0.028	6.37	
20	9.16	0.00	32.592	0.000	25.23	275.0	0.056	6.37	0.00
30	9.15	0.00	32.586	0.000	25.23	275.4	0.083	6.44	0.00
50	9.12	0.00	32.566	0.002	25.22	276.8	0.138	6.43	0.01
75	9.16	0.00	32.681	0.002	25.30	269.3	0.207	6.20	0.01
100	9.10	0.01	33.133	0.009	25.66	235.4	0.270	5.01	0.01
150	7.97	0.05	33.778	0.037	26.34	171.7	0.372	3.76	0.00
200	7.42	0.04	33.888	0.018	26.51	156.7	0.454	3.29	0.02
250	6.77	0.01	34.017	0.008	26.70	139.0	0.528	3.00	0.00
300	6.33	0.03	34.057	0.016	26.79	131.0	0.595	2.69	0.01
400	5.65	0.00	34.092	0.000	26.90	121.0	0.721	2.13	0.01
500	5.05	0.00	34.155	0.000	27.02	110.1	0.837	1.68	0.00
600	4.56	---	34.210	---	27.13	100.6	0.942	1.29	---
700	4.19	---	34.286	---	27.22	92.2	1.038	0.94	---

STATION 280-058 OBSERVED VALUES													
DATE 3/22/61		HR 02		LAT 47-17N		LONG 126-08W		SDG 2012		WEA 03			
SECDI BA 14		CL 6		AMT 8		DRY 9.3		WET 7.9		RELHU 80		VIS 7	
WVEL 10		DIR 12		SEA 2		DIR		SWL 1		DIR		WA 40, 34, 14	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	3	9.02	32.672	25.32	6.41	1.17	14	9.2	0.41	2.10			
A	7								0.24	1.93			
	9	9.01	32.667	25.31	6.74	1.22	15	9.0					
	18	9.02	32.671	25.32	6.48	1.17	18	9.0	0.40	1.90			
A	22	9.00	32.679	25.32	6.38	1.19	15	9.2					
	27	8.98	32.672	25.32	6.40	1.19	16	9.4					
	36												
	43								0.44	1.03			
A	55	8.94	32.773	25.41	6.12	1.17	19	10.6					
	73	8.86	33.108	25.68	5.04	1.66	22	16.4					
	92	8.66	33.601	26.10	3.66	2.20	32	23.7					
	115	8.35	33.754	26.26	3.21	2.26	41	26.2					
	138	7.98	33.878	26.42	2.81	2.36	41	27.5					
	140	8.06	33.780	26.33	3.20	2.35	42	26.5					
	161	7.72	33.893	26.47	2.62	2.49	44	29.0					
	217	7.37	33.938	26.55	2.52	2.59	47	30.0					
1	374	6.13	34.025	26.79	1.65	2.89	67	34.5					
1	545	4.94	34.170	27.05	0.60	3.33	108	39.9					
2	781	4.28	34.285	27.21	0.38	3.42	114	42.0					
	1248	3.02	34.474	27.49	0.50	3.60	153	45.6					

STATION 280-058 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
10	9.02	0.00	32.672	0.000	25.32	266.6	0.029	6.41	0.01
20	9.02	0.00	32.673	0.001	25.32	266.8	0.054	6.45	0.00
30	8.99	0.00	32.676	0.002	25.32	266.5	0.081	6.39	0.01
50	8.95	0.00	32.726	0.003	25.37	262.4	0.133	6.26	0.01
75	8.84	0.00	33.164	0.007	25.73	228.8	0.195	4.88	0.02
100	8.56	0.00	33.683	0.017	26.18	186.5	0.247	3.42	0.05
150	7.86	0.02	33.860	0.020	26.43	163.3	0.334	2.79	0.07
200	7.44	0.03	33.944	0.013	26.55	152.7	0.413	2.44	0.08
250	7.12	0.01	33.957	0.003	26.60	148.2	0.488	2.38	0.02
300	6.73	0.02	33.985	0.004	26.68	141.6	0.561	2.12	0.03
400	5.92	0.01	34.047	0.002	26.83	127.8	0.696	1.47	0.02
500	5.22	0.01	34.132	0.003	26.98	113.9	0.816	0.85	0.03
600	4.73	0.03	34.202	0.003	27.09	103.9	0.925	0.48	0.04
700	4.44	0.04	34.252	0.003	27.17	97.7	1.026	0.36	0.05
800	4.23	---	34.294	---	27.22	93.0	1.121	0.37	---
1000	3.68	---	34.380	---	27.35	81.9	1.296	0.34	---
1200	3.15	---	34.457	---	27.46	71.4	1.450	0.45	---

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STATION 280-059 OBSERVED VALUES

DATE 3/22/61 HR 07 LAT 47-34N LONG 126-03W SDG 1450 WEA 63
SECDI BA 11 CL 6 AMT 8 DRY 10.3 WET 8.6 RELHU 87 VIS 7
WVEL 13 DIR 13 SEA 2 DIR 13 SWL 1 DIR WA 45, 30, 08

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	3	9	9.12	32.621	25.26	6.44	1.17			0.63	0.66	
	3	10	9.12	32.617	25.26	6.45	1.17			0.60	0.99	
A	3	20	9.12	32.618	25.26	6.46	1.14			0.47	1.03	
	3	22	9.11	32.619	25.26	6.44	1.16					
	3	30	9.10	32.620	25.26	6.44	1.24					
	3	40										
A		43								0.32	0.56	
	3	60	9.06	32.621	25.27	6.38	1.17					
	3	79	8.92	32.928	25.53	5.52	1.47					
	3	99	8.54	33.593	26.11	3.71	2.18					
	3	124	8.09	33.725	26.28	3.34	2.29					
	3	149	7.78	33.820	26.40	3.00	2.40					
	2	172	7.68	33.857	26.44	2.82						
	3	173	7.61	33.864	26.46	2.79	2.49					
	2	269	6.70	33.992	26.69	2.02	2.65					
	1	341	5.90	34.012	26.81	1.59	2.82					
	1	557	4.94	34.147	27.03	0.68	3.32					
	1	853	3.79	34.365	27.32	0.29	3.60					

STATION 280-059 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.12		32.621		25.26	271.9	0.000	6.44	
10	9.12		32.617		25.26	272.4	0.028	6.45	
20	9.12		32.618		25.26	272.5	0.055	6.46	
30	9.11		32.619		25.26	272.4	0.082	6.44	
50	9.09	0.00	32.590	0.014	25.25	273.9	0.137	6.47	0.03
75	8.96	0.00	32.838	0.001	25.45	254.8	0.203	5.77	0.00
100	8.52	0.00	33.606	0.005	26.12	191.6	0.259	3.67	0.01
150	7.77	0.00	33.822	0.000	26.40	165.7	0.348	2.99	0.00
200	7.43	0.04	33.906	0.004	26.52	155.5	0.428	2.57	0.02
250	6.93	0.02	33.972	0.003	26.64	144.5	0.503	2.17	0.01
300	6.35	0.01	34.004	0.003	26.74	135.1	0.573	1.82	0.00
400	5.56	0.04	34.051	0.003	26.88	123.0	0.702	1.28	0.01
500	5.18	0.00	34.126	0.011	26.98	113.8	0.821	0.85	0.01
600	4.76	---	34.176	---	27.07	106.1	0.931	0.56	---
700	4.36	---	34.248	---	27.17	97.1	1.032	0.37	---
800	3.98	---	34.323	---	27.27	87.9	1.125	0.29	---

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STATION 280-060 OBSERVED VALUES											
DATE	3/22/61	HR	02	LAT	47-49N	LONG	125-49W	SDG	1500	WEA	63
SECDI	BA	07	CL	AMT	9	DRY	8.9	WET	8.6	RELHU	99
WVEL	18	DIR	14	SEA	2	DIR	14	SWL	1	DIR	10.09
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	9.23	32.553	25.19	6.48	1.03					
2	10	9.24	32.556	25.19	6.52	1.02					
2	20	9.23	32.556	25.19	6.47	0.96					
2	30	9.23	32.557	25.19	6.48	0.97					
2	40	9.22	32.558	25.20	6.48	1.06					
2	60	9.16	32.577	25.22	6.45	1.08					
2	80	9.18	32.625	25.25	6.25	1.10					
2	99	8.98	33.343	25.85	4.33	1.94					
2	124	8.44	33.622	26.15	3.72	2.11					
2	149	7.80	33.887	26.49	2.97	2.42					
2	174	7.50	33.910	26.54	2.71	2.53					
1	196	7.33	33.910	26.54	2.38	2.53					
1	294	6.30	34.011	26.76	1.84	2.98					
1	489	5.11	34.113	26.98	0.83	3.33					
1	733	4.12	34.292	27.23	0.38	3.51					
1	1025	3.50	34.393	27.38	0.35	3.81					

STATION 280-060			INTERPOLATED AND COMPUTED VALUES						
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEO.POT. ANOMALY	OXY.	E(O)
0	9.23		32.553		25.19	278.6	0.000	6.48	
10	9.24		32.556		25.19	278.7	0.028	6.52	
20	9.23		32.556		25.19	278.7	0.056	6.47	
30	9.23		32.557		25.19	278.8	0.084	6.48	
50	9.19	0.01	32.564	0.000	25.21	278.0	0.140	6.48	0.01
75	9.18	0.01	32.578	0.022	25.22	277.4	0.209	6.40	0.05
100	8.96	0.00	33.362	0.004	25.86	216.3	0.271	4.29	0.01
150	7.78	0.00	33.803	0.004	26.39	167.3	0.367	2.96	0.00
200	7.24	0.03	33.914	0.000	26.55	152.3	0.447	2.41	0.04
250	6.71	0.01	33.968	0.001	26.67	141.9	0.520	2.08	0.00
300	6.25	0.00	34.015	0.001	26.76	133.1	0.589	1.80	0.00
400	5.56	0.03	34.072	0.007	26.90	121.3	0.716	1.25	0.02
500	5.05	0.00	34.121	0.001	26.99	112.7	0.833	0.80	0.00
600	4.60	0.01	34.196	0.006	27.11	102.7	0.941	0.55	0.02
700	4.23	0.00	34.269	0.003	27.20	93.9	1.039	0.40	0.01
800	3.92	---	34.326	---	27.28	87.0	1.130	0.32	---
1000	3.53	---	34.389	---	27.37	79.4	1.296	0.33	---

STATION 280-061 OBSERVED VALUES

DATE 3/22/61 HR 13 LAT 47-46N LONG 125-38W SDG 988 WEA 63
 SECD1 BA 04 CL AMT 9 DRY 8.5 WET 8.5 RELHU 99 VIS
 WVEL 13 DIR 16 SEA 3 DIR 16 SWL 5 DIR 14 WA 25.40

CAST DEPTH TEMP. SAL. SIGMA-T OXY. PHOS. SIL. NITR. CHL-A PROD-I PROD-S

2	0	9.32	32.547	25.17	6.37	0.84	15	6.6		
1	7	9.32	32.548	25.17	6.38	0.86	12	6.5		
1	15	9.36	32.561	25.18	6.38	0.83	11	6.3		
1	23	9.35	32.545	25.16	6.41	0.85	15	5.3		
1	32	9.34	32.549	25.17	6.42	0.93	13	6.6		
1	49	9.32	32.540	25.17	6.38	0.86	11	6.2		
1	65	9.31	32.550	25.17	6.34	0.86	15	6.0		
1	81	9.26	32.561	25.19	6.34	0.93	15	6.6		
1	102	9.08	33.100	25.64	4.90	1.39	21	11.5		
2	108	8.27*	33.667*	26.21	2.06*		34*	21.2*		
1	122	8.38	33.628	26.16	3.56	1.86	36	18.4		
1	143	7.86	33.792	26.37	3.11	2.17	40	22.0		
2	165	7.38	33.911	26.53	2.53	2.27	64	24.8		
2	276	6.42	34.006	26.74	1.85	2.58	68	27.1		
2	465	5.24	34.090	26.95	0.96	3.26	88	40.0		

STATION 280-061 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
M	9.32	0.00	32.547	0.002	25.17	280.4	0.000	6.37	0.00
10	9.34	0.00	32.554	0.002	25.17	280.3	0.029	6.38	0.00
20	9.36	0.00	32.552	0.002	25.17	281.0	0.057	6.40	0.00
30	9.34	0.00	32.547	0.001	25.17	281.2	0.085	6.42	0.00
50	9.32	0.00	32.540	0.000	25.17	281.8	0.141	6.38	0.00
75	9.29	0.00	32.537	0.013	25.17	282.0	0.211	6.39	0.04
100	9.11	0.01	33.035	0.008	25.59	242.8	0.274	5.07	0.02
150	7.70	0.00	33.835	0.001	26.42	163.7	0.370	2.92	0.01
M	6.93	0.08	33.988	0.029	26.65	142.6	0.447	2.11	0.13
M	6.53	0.07	34.023	0.024	26.73	135.3	0.516	1.84	0.11
200	6.24	---	34.022	---	26.77	132.4	0.583	1.72	---
300	5.58	---	34.072	---	26.89	121.6	0.710	1.23	---
400		---		---					---

STATION 280-061D OBSERVED VALUES

DATE 3/22/61 HR 15 LAT 47-45N LONG 125-35W SDG 831 WEA 02
 SECDI BA CL AMT DRY 10.0 WET 9.2 RELHU 87 VIS 6
 WVEL 18 DIR 14 SEA DIR SWL DIR WA

DEPTH

CHL-A PROD-I PROD-S
 0.51 0.29 8.04

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STATION 280-062 OBSERVED VALUES

DATE 3/22/61 HR 18 LAT 47-38N LONG 125-19W SDG 831 WEA 02
 SECDI BA CL 6 AMT 8 DRY 10.0 WET 9.2 RELHU 87 VIS 6
 WVEL 9 DIR 16 SEA 2 DIR 16 SWL 1 DIR 14 WA 20, 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	9.14	32.572	25.22	6.45	1.12	17	7.6	0.38	0.59	6.40
2	10	9.13	32.567	25.22	6.47	0.68	10	5.8	0.37	1.40	7.06
2	19	9.12	32.567	25.22	6.47	1.12	13	7.2	0.43	1.40	1.48
2	23	9.11	32.567	25.22	6.45	0.75					
2	29	9.12	32.569	25.22	6.47	1.12					
2	39										
2	46	9.12	32.585	25.23	6.43	0.73	16	6.7	0.51	1.02	0.20
2	59	9.08	32.657	25.29	6.17	1.21					
2	78	8.58	33.407	25.96	4.28	1.22					
2	98					2.06					
2	123	7.94	33.714	26.29	3.41	2.28					
2	146	7.69	33.835	26.43	2.98	2.44					
2	171	7.39	33.910	26.53	2.68	2.62					
1	187	7.32	33.926	26.55	2.61	2.54					
1	281	6.56	33.998	26.71	1.98	2.72					
1	469	5.39	34.092	26.93	1.04	2.90					
1	713	4.27	34.267	27.20	0.48	3.65					

STATION 280-062 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	9.14		32.572		25.22	275.8	0.000	6.45	
10	9.13		32.567		25.22	276.2	0.028	6.47	
20	9.12	0.00	32.567	0.000	25.22	276.2	0.056	6.47	0.00
30	9.11	0.00	32.567	0.000	25.22	276.3	0.083	6.45	0.00
50	9.12	0.00	32.573	0.002	25.22	276.4	0.139	6.47	0.01
75	9.10	0.01	32.623	0.013	25.26	272.8	0.207	6.27	0.03
100	8.52	0.00	33.448	0.006	26.00	203.4	0.267	4.17	0.02
150	7.64	0.01	33.851	0.000	26.45	161.6	0.358	2.92	0.00
200	7.13	0.02	33.954	0.012	26.60	147.8	0.435	2.44	0.03
250	6.75	0.02	33.994	0.012	26.68	140.4	0.507	2.12	0.03
300	6.43	0.00	34.008	0.002	26.74	135.8	0.576	1.87	0.00
400	5.78	0.01	34.059	0.004	26.86	125.0	0.707	1.33	0.00
500	5.22	---	34.111	---	26.97	115.5	0.827	0.93	---
600	4.73	---	34.179	---	27.08	105.6	0.938	0.65	---
700	4.32	---	34.256	---	27.18	95.9	1.038	0.49	---

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STATION 280-063 OBSERVED VALUES													
DATE	3/22/61	HR	22	LAT	47-32N	LONG	125-02W	SDG	338	WEA	60		
SECD1	BA 08	CL	6	AMT	8	DRY	10.2	WET	10.2	RELHU	99	VIS	6
WVEL	13	DIR	16	SEA	2	DIR	16	SWL	1	DIR	20	WA	20.11
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	9.71	32.674	25.21	6.43	1.07			0.59	1.85			
	3	9.70	32.660	25.20	6.51	1.02							
	6	9.70	32.655	25.19	6.43	1.03							
A	7								0.49	2.55			
	10	9.70	32.657	25.20	6.51	1.03							
	15	9.68	32.658	25.20	6.42	1.04							
	20	9.64	32.670	25.22	6.37	1.10							
A	23								0.42	2.42			
	25	9.62	32.680	25.23	6.37	1.02							
	29	9.60	32.677	25.23	6.37	1.09							
	39	9.54	32.748	25.29	6.07	1.01							
A	46								0.32	0.85			
	59	9.53	32.669	25.23	6.34	1.08							
	79	9.52	32.988	25.48	5.41	1.42							
	98	8.98	33.240	25.77	4.87	1.68							
	119	8.72	33.509	26.02	4.05	2.04							
	143	8.27	33.698	26.23	3.36	2.32							
	166	8.06	33.748	26.30	3.19	2.37							
	190	7.74	33.833	26.42	2.92								
	286	6.74	33.986	26.68	2.14	2.79							

STATION 280-063 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.71		32.674		25.21	277.0	0.000	6.43	
10	9.70		32.657		25.20	278.3	0.028	6.51	
20	9.64		32.660		25.22	276.5	0.056	6.37	
30	9.59	0.00	32.683	0.003	25.23	275.0	0.084	6.34	0.01
50	9.53	0.01	32.698	0.029	25.26	273.2	0.138	6.22	0.10
75	9.54	0.01	32.910	2.004	25.42	258.3	0.205	0.02	
100	8.95	0.01	33.268	0.001	25.79	223.1	0.259	4.79	0.01
150	8.20	0.01	33.718	0.006	26.26	179.5	0.359	3.29	0.02
200	7.61	---	33.863	---	26.46	161.2	0.444	2.82	---
250	7.06	---	33.964	---	26.62	146.9	0.522	2.38	---

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STATION 280-064 OBSERVED VALUES

DATE 3/23/61 HR 00 LAT 47-27N LONG 124-49W SDG 238 WEA 61
 SECDI BA 07 CL 6 AMT 8 DRY 9.9 WET 9.9 RELHU 99 VIS 6
 WVEL 13 DIR 16 SEA 2 DIR 16 SWL 1 DIR 16 WA 20.25

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.68	32.637	25.18	6.41	0.97			0.42	1.24	
A	3	9.66	32.637	25.19	6.42	0.99			0.47	1.51	
	5										
	6	9.66	32.650	25.20	6.40	1.00					
	9	9.65	32.650	25.20	6.42	1.00					
A	14	9.66	32.645	25.19	6.41	1.07					
	18										
	19	9.66	32.641	25.19	6.41	0.97			0.37	1.21	
	24	9.66	32.640	25.19	6.42	0.98					
	28	9.64	32.638	25.19	6.42	1.02					
A	35	9.58	32.643	25.20	6.40	0.93			0.42	0.93	
	53	9.56	32.638	25.20	6.30	0.91					
	71	9.54	32.648	25.21	6.29	0.95					
	89	9.44	32.674	25.25	6.22	1.00					
	112	9.23	33.178	25.68	4.37	1.58					
	135	9.02	33.379	25.87	4.09	1.84					
	157	8.76	33.513	26.01	3.76	2.26					

STATION 280-064 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.68	0.00	32.637	0.000	25.18	279.2	0.000	6.41	0.00
10	9.65	0.00	32.649	0.000	25.20	278.1	0.028	6.42	0.00
20	9.66	0.00	32.641	0.000	25.19	279.0	0.056	6.41	0.00
30	9.63	0.00	32.637	0.000	25.19	279.0	0.084	6.42	0.00
50	9.56	0.00	32.639	0.001	25.20	278.1	0.140	6.32	0.00
75	9.52	0.00	32.639	0.009	25.21	278.0	0.209	6.33	0.03
100	9.35	0.00	32.901	0.035	25.44	256.3	0.276	5.36	0.15
150	8.85	---	33.477	---	25.97	207.0	0.392	3.87	---

STATION 280-065 OBSERVED VALUES

DATE 3/23/61 HR 03 LAT 47-42N LONG 124-37W SDG 38 WEA 61
 SECD1 BA 06 CL X AMT 9 DRY 10.3 WET 10.2 RELHU 99 VIS 6
 WVEL 13 DIR 16 SEA 2 DIR 16 SWL 1 DIR WA 22

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.86	27.955	21.51	6.88	0.88	39	7.6	0.80	4.00	
A	1	9.87	27.953	21.51	6.88	0.88	38	7.3	1.34	3.56	
A	5	9.86	27.961	21.52	6.66	0.81	43	7.4	0.80	2.11	
A	1	9.84	28.132	21.65	6.63	0.88	39	7.5	0.95	4.28	
	11										
	14	9.91	29.395	22.62	6.52	0.92	30	6.9			
	19	9.93	30.386	23.39	6.46	0.87	28	6.3			
	1	9.91	30.388	23.40	6.45	0.88	25	6.2			
	1	9.90	30.624	23.58	6.45	0.88	23	6.2			

STATION 280-065 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.86		27.955		21.51	629.7	0.000	6.88	
10	9.85	0.00	28.347	0.040	21.82	600.6	0.062	6.61	0.00
20	9.93	0.00	30.412	0.027	23.41	448.4	0.114	6.46	0.00

STATION 280-066 OBSERVED VALUES

DATE 3/23/61 HR 07 LAT 47-50N LONG 124-48W SDG 64 WEA 55
 SECDI BA 06 CL X AMT 9 DRY 8.9 WET 8.8 RELHU 99 VIS 5
 WVEL 11 DIR 20 SEA 2 DIR 20 SWL 1 DIR 16 WA 15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.82	32.191	24.81	6.42	1.10					
1	3	9.76	32.204	24.83	6.38	1.13					
1	6	9.82	32.197	24.82	6.38	1.07					
1	10	9.80	32.211	24.83	6.41	1.06					
1	14	9.82	32.211	24.83	6.35	1.08					
1	19	9.82	32.239	24.85	6.36	1.08					
1	24	9.80	32.321	24.92	6.36	1.09					
1	29	9.77	32.380	24.97	6.29	1.11					
1	39	9.76	32.435	25.01	6.26	1.12					
1	58	9.64	32.541	25.11	6.19	1.13					

STATION 280-066 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.82		32.191		24.81	314.5	0.000	6.42	
10	9.86		32.211		24.83	312.9	0.032	6.41	
20	9.82	0.00	32.254	0.002	24.86	310.1	0.063	6.35	0.02
30	9.77	0.00	32.387	0.001	24.97	299.7	0.094	6.28	0.00
50	9.71	---	32.496	---	25.07	291.0	0.153	6.22	---

STATION 280-067 OBSERVED VALUES													
DATE	3/23/61	HR	07	LAT	47-58N	LONG	125-02W	SDG	117	WEA	01	RELHU	VIS
SECD1	BA	08	CL	6	AMT	8	DRY	WET	WA	08			
WVEL	8	DIR	23	SEA	2	DIR	23	SWL	1	DIR			
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	9.76	32.652	25.18	6.40	1.04	15	5.2	0.44	1.70			
	3	9.77	32.657	25.18	6.40	1.06	12	5.2	0.54	1.41			
	6	9.78	32.651	25.18	6.40	1.06	10	5.2					
A	10	9.77	32.649	25.18	6.37	1.02	15	5.1	0.64	1.36			
	11												
	15	9.78	32.652	25.18	6.37	1.04	12	5.0					
	20	9.76	32.647	25.18	6.38	1.01	11	5.2	0.36	0.77			
A	22	9.78	32.649	25.18	6.41	1.01	14	5.0					
	25	9.75	32.651	25.18	6.41	1.03	10	5.7					
	30												
	40	9.75	32.652	25.18	6.41	0.96	10	5.0					
	59	9.74	32.647	25.18	6.38	0.96	15	5.1					
	79	9.70	32.660	25.20	6.34	1.07	12	5.4					
	99	9.54	32.830	25.36	5.72	1.27	15	8.1					

STATION 280-067 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.76		32.652		25.18	279.4	0.000	6.40	
10	9.77		32.649		25.18	279.9	0.028	6.37	
20	9.76		32.647		25.18	280.1	0.056	6.38	
30	9.75		32.651		25.18	279.8	0.084	6.41	
50	9.75	0.00	32.649	0.001	25.18	280.3	0.140	6.40	0.00
75	9.71	0.00	32.650	0.004	25.19	280.2	0.211	6.37	0.02

DATE 3/23/61
SECDI BA
WVEL DIR

HR 14
CL
SEA

LAT 48
AMT
DIR

-23N
DRY
SW

LONG 12 W
DI

5-24W

SDG
RELHUWEA
VIS

DEPTH

○

CHL-A
0.47

PROD-I
2.14

PROD-S
18.86

STATION 280-068 OBSERVED VALUES									
DATE	3/23/61	HR	10	LAT	48-07N	LONG	125-14W	SDG	255
SECD	1	BA	08	CL	DRY	9.2	WET	8.3	RELHU 93
WVEL	4	DIR	23	SEA	2	DIR	1	DIR	WA 03, 05
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
2	0	9.70	32.667	25.20	6.40	0.80	11	6.1	
2	3	9.68	32.660	25.20	6.37	0.80	8	5.1	
2	6	9.69	32.661	25.20	6.38	0.85	9	4.2	
2	10	9.68	32.661	25.20	6.35	0.80	10	4.9	
2	15	9.68	32.662	25.20	6.36	0.91	10	4.8	
2	20	9.68	32.662	25.20	6.37	0.88	10	4.9	
2	25	9.68	32.677	25.21	6.27	0.88	13	5.8	
2	30	9.66	32.668	25.21	6.33	0.89	13	5.8	
2	40	9.67	32.672	25.21	6.27	0.81	13	5.2	
2	60	9.68	32.662	25.20	6.02	0.81	10	5.1	
2	80	9.65	32.662	25.21	6.07	0.88	13	5.8	
2	100	9.54	32.659	25.22	6.32	0.89	11	5.4	
1	124	9.22	33.383	25.84	4.32	1.79	29	13.6	
1	149	8.48	33.626	26.14	3.52	2.12	39	24.0	
1	174	8.28	33.676	26.21	3.44	2.18	38	24.2	
1	199	8.18	33.709	26.26	3.27	2.22	40	25.9	

STATION 280-068 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.70		32.667		25.20	277.3	0.000	6.40	
10	9.68		32.661		25.20	277.6	0.028	6.35	
20	9.68		32.662		25.20	277.8	0.056	6.37	
30	9.66		32.668		25.21	277.2	0.084	6.33	
50	9.68	0.00	32.668	0.001	25.21	277.8	0.139	6.14	0.02
75	9.68	0.00	32.662	0.000	25.21	278.5	0.209	6.03	0.00
100	9.54		32.659		25.22	277.3	0.278	6.32	
150	8.47	0.00	33.630	0.001	26.15	189.9	0.395	3.51	0.01

STATION 280-069 OBSERVED VALUES									
DATE	3/23/61	HR	13	LAT	48-23N	LONG	125-36W	SDG	146
SECD	I	BA	08	CL	9	DRY	9.0	WET	8.3
WVEL	4	DIR	21	SEA	2	DIR	21	SWL	1
								DIR	21
								WA	10
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
1	0	9.66	32.194	24.84	5.66	0.93			
1	3	9.66	32.187	24.84	5.66	0.92			
1	6	9.65	32.191	24.84	5.65	0.93			
1	9	9.65	32.189	24.84	5.65	0.89			
1	14	9.66	32.188	24.84	5.66	1.03			
1	19	9.65	32.185	24.84	5.65	1.07			
1	24	9.66	32.238	24.88	5.67	0.93			
1	29	9.66	32.297	24.92	5.63	0.96			
1	38	9.64	32.301	24.93	5.59	0.87			
1	58	9.59	32.511	25.10	5.56	0.87			
1	77	9.55	32.597	25.17	5.58	0.87			
1	97	9.62	32.655	25.21	5.58	0.93			
1	121	9.46	32.695	25.26	5.30	1.02			
1	136	9.16	32.899	25.47	4.66	1.32			

STATION 280-069 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.66	0.00	32.194	0.000	24.84	311.8	0.000	5.66	0.00
10	9.65	0.00	32.189	0.001	24.84	312.2	0.032	5.65	0.00
20	9.65	0.00	32.193	0.003	24.84	312.1	0.063	5.66	0.00
30	9.66	0.00	32.299	0.003	24.92	304.5	0.094	5.62	0.00
50	9.61	0.00	32.418	0.016	25.02	295.3	0.154	5.56	0.00
75	9.55	0.00	32.591	0.001	25.17	282.0	0.226	5.58	0.00
100	9.62	0.00	32.651	0.007	25.20	279.1	0.296	5.58	0.01

STATION 280-070 OBSERVED VALUES													
DATE	3/23/61	HR	16	LAT	48-26N	LONG	125-10W	SDG	168	WEA	02		
SECD	1	BA	08	CL	9	DRY	9.6	WET	8.8	RELHU	93	VIS	6
WVEL	6	DIR	21	SEA	2	DIR	21	SWL	1	DIR	21	WA	30
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
B	1	9.67	31.095	23.98	6.42	0.93			0.73	5.91			
	3	9.66	31.096	23.99	6.44	0.89			0.60	4.39			
A	5	9.66	31.137	24.02	6.41	0.85							
	9	9.54	31.507	24.33	6.30	0.89							
	11												
A	13	9.55	32.036	24.74	6.15	1.08			0.55	1.63			
	18	9.54	32.036	24.74	6.09	1.09							
A	22	9.56	32.261	24.91	6.10	0.92			0.24	1.34			
	23	9.58	32.280	24.92	6.15	0.91							
	27												
A	36	9.68	32.357	24.97	6.20	0.82							
	54	9.68	32.421	25.01	6.23	0.77							
	72	9.52	32.480	25.09	6.26	0.83							
	90	9.56	32.608	25.18	6.16	0.84							
A	112	9.38	32.674	25.26	5.94	0.88							
	135	8.99	32.950	25.54	5.06	1.25							

STATION 280-070 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.67	0.00	31.095	0.020	23.98	393.5	0.000	6.42	0.00
10	9.54	0.00	31.654	0.018	24.44	350.1	0.038	6.26	0.00
20	9.55	0.00	32.126	0.003	24.81	315.4	0.071	6.09	0.00
30	9.61	0.01	32.305	0.003	24.94	303.4	0.102	6.17	0.00
50	9.70	0.00	32.412	0.003	25.01	297.1	0.162	6.23	0.00
75	9.53	0.01	32.501	0.003	25.10	288.3	0.235	6.25	0.00
100	9.51	0.00	32.632	0.012	25.21	278.7	0.306	6.10	0.02

STATION 280-071 OBSERVED VALUES

DATE 3/23/61 HR 17 LAT 48-27N LONG 124-45W SDG 228 WEA 50
 SECDI BA 04 CL 6 AMT 8 DRY 8.6 WET 8.3 RELHU 93 VIS 6
 WVEL 10 DIR 19 SEA 1 DIR 19 SWL 1 DIR 21 WA 15.15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
E	2	9.83	29.097	22.40	6.65	0.81	35	6.8	1.30	7.36	44.42
A	2	9.82	29.110	22.42	6.64	0.84	33	6.6	1.42	8.67	23.28
A	4	9.78	29.196	22.49	6.65	1.16	32	5.8	1.29	7.56	4.06
A	6	9.70	29.369	22.64	6.55	0.77	33	6.3	0.39	5.32	0.38
	8					1.23	33	7.9			
	10					0.87	34	7.6			
	14	9.60	29.412	22.69	6.57	1.00	31	7.6			
	19	9.48	29.532	22.80	6.51	0.98	33	8.6			
	24	9.29	29.843	23.07	6.35	1.02	36	10.1			
	29	9.20	30.214	23.37	6.35	1.02	31	10.2			
	39	9.02	30.326	23.49	6.20	1.17	29	9.7			
	58	8.79	31.394	24.35	5.72	1.38	35	14.4			
	78	9.22	32.121	24.85	5.79	1.21	22	10.5			
	97	9.65	32.344	24.96	6.24	0.72	14	5.8			
	113	9.53	32.630	25.20	6.06	0.99	17	8.1			
	136	9.18	32.795	25.39	5.43	1.22	20	10.1			
	158	8.81	32.992	25.60	4.87	1.52	29	15.7			
	181	8.16	33.449	26.05	3.69	1.89	42	21.4			

STATION 280-071 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.83		29.097		22.40	544.3	0.000	6.65	
10	9.70		29.369		22.64	522.3	0.054	6.55	
20	9.44	0.00	29.584	0.003	22.84	502.6	0.105	6.49	0.00
30	9.18	0.00	30.237	0.017	23.39	450.4	0.153	6.34	0.00
50	8.84	0.02	30.898	0.060	23.96	396.6	0.237	5.91	0.03
75	9.13	0.01	32.041	0.002	24.81	316.4	0.327	5.75	0.00
100	9.65	0.01	32.400	0.006	25.00	298.2	0.403	5.23	0.01
150	8.96	0.01	32.905	0.008	25.51	251.1	0.541	5.17	0.01

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STATION 280-072 OBSERVED VALUES

DATE 3/23/61 HR 16 LAT 48-15N LONG 124-07W SDG 165 WEA 50
 SECD1 BA 06 CL 8 AMT 7 DRY WET RELHU VIS 7
 WVEL DIR 00 SEA 0 DIR 00 SWL 0 DIR WA 02

CST DEPTH TEMP. SAL. SIGMA-T OXY. PHOS. SIL. NITR. CHL-A PROD-I PROD-S

1	0	8.79	30.235	23.45	6.45				
1	3	8.58	30.300	23.53	6.44				
1	6	8.52	30.350	23.58	6.29				
1	10	8.50	30.413	23.63	5.23				
1	15	8.42	30.503	23.71	6.09				
1	20	8.45	30.711	23.87	5.91				
1	25	8.36	30.786	23.94	5.79				
1	30	8.32	30.860	24.01	5.66				
1	40	8.32	31.029	24.14	5.58				
1	60	8.46	31.441	24.44	5.43				
1	80	8.91	32.228	24.99	5.34				
1	100	9.08	32.748	25.37	5.34				
1	125	8.79	32.931	25.55	4.86				
1	150	8.38	33.200	25.83	4.21				

STATION 280-072 INTERPOLATED AND COMPUTED VALUES

DEPTH TEMP. E(T) SAL. E(S) SIGMA-T SP.VOL. ANOMALY GEOPOT. ANOMALY OXY. E(O)

0	8.79		30.235		23.45	444.5	0.000	6.45	
10	8.50		30.413		23.63	427.3	0.044	6.23	
20	8.45		30.711		23.87	404.6	0.086	5.91	
30	8.32		30.850		24.01	391.8	0.126	5.66	
50	8.36	0.01	31.205	0.012	24.27	366.9	0.201	5.50	0.00
75	8.80	0.02	32.026	0.020	24.85	312.5	0.286	5.36	0.00
100	9.08		32.748		25.37	263.6	0.358	5.34	
150	8.38		33.190		25.83	220.6	0.479	4.21	

STATION 280-073 OBSERVED VALUES														
DATE	3/24/61	HR	01	LAT	48-18N	LONG	124-03W	SDG	188	WEA	50			
SECD1	BA	07	CL	8	AMT	7	DRY	8.8	WET	8.3	RELHU	93	VIS	7
WVEL	DIR	00	SEA	0	DIR	00	SWL	0	DIR	03	WA	03		
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	1	9.02	30.185	23.38	6.51	1.59			0.61	2.04				
A	1	8.88	30.206	23.41	6.51	1.57			1.17	6.05				
	4													
	6	8.64	30.246	23.48	6.52	1.54								
	10	8.60	30.276	23.51	6.50	1.55								
A	15													
	20	8.50	30.355	23.59	6.36	1.60			1.81	5.58				
P	1	8.42	30.548	23.75	5.92	1.73			1.14	5.07				
	30	8.32	30.724	23.90	5.82	1.66								
	40	8.36	31.291	24.34	5.42	1.68								
	60													
	80	8.40	31.651	24.61	5.19	1.81								
	100	8.50	32.082	24.93	4.94	1.81								
	125	8.44	32.939	25.61	4.27	1.83								
	150	8.18	33.325	25.95	3.76	1.96								
	175	8.08	33.423	26.05	3.58	2.12								

STATION 280-073 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	9.02		30.185		23.38	451.5	0.000	6.51					
10	8.60		30.276		23.51	438.9	0.045	6.50					
20	8.50		30.355		23.59	431.8	0.089	6.36					
30	8.42		30.548		23.75	416.4	0.131	5.92					
50	8.32	0.01	31.003	0.021	24.12	381.5	0.211	5.63	0.02				
75	8.39	0.00	31.567	0.009	24.55	340.7	0.301	5.24	0.01				
100	8.50		32.082		24.93	304.5	0.382	4.94					
150	8.18		33.325		25.95	208.4	0.510	3.76					

STATION 280-074														OBSERVED VALUES									
DATE	3/24/61	HR	02	LAT	48-22N	LONG	124-00W	SDG	137	WEA	16												
SECDI	BA	06	CL	8	AMT	5	DRY	10.1	WET	9.4	RELHU	93	VIS	7									
WVEL	DIR	00	SEA	0	DIR	00	SWL	0	DIR	03	WA	03											
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S												
1	0	9.26	30.155	23.32	6.59																		
1	3	8.87	30.255	23.45	6.46																		
1	6	8.62	30.444	23.64	6.26																		
1	10	8.48	30.713	23.87	5.99																		
1	15	8.44	30.723	23.88	5.96																		
1	20	8.41	30.818	23.96	5.84																		
1	25	8.38	30.861	24.00	5.79																		
1	30	8.38	30.884	24.02	5.77																		
1	40	8.38	30.941	24.06	5.73																		
1	60	8.34	31.177	24.25	5.54																		
1	80	8.38	31.375	24.40	5.43																		
1	100	8.42	31.992	24.88	4.93																		
1	125	8.30	32.996	25.68	4.10																		

STATION 280-074										INTERPOLATED AND COMPUTED VALUES			
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	9.26		30.155		23.32	457.2	0.000	6.59					
10	8.48		30.713		23.87	404.7	0.044	5.99					
20	8.41		30.818		23.96	396.0	0.084	5.84					
30	8.38		30.884		24.02	390.8	0.123	5.77					
50	8.36	0.01	31.051	0.008	24.15	378.4	0.200	5.64	0.01				
75	8.37	0.00	31.308	0.014	24.35	359.7	0.292	5.47	0.01				
100	8.42		31.992		24.88	310.0	0.376	4.93					

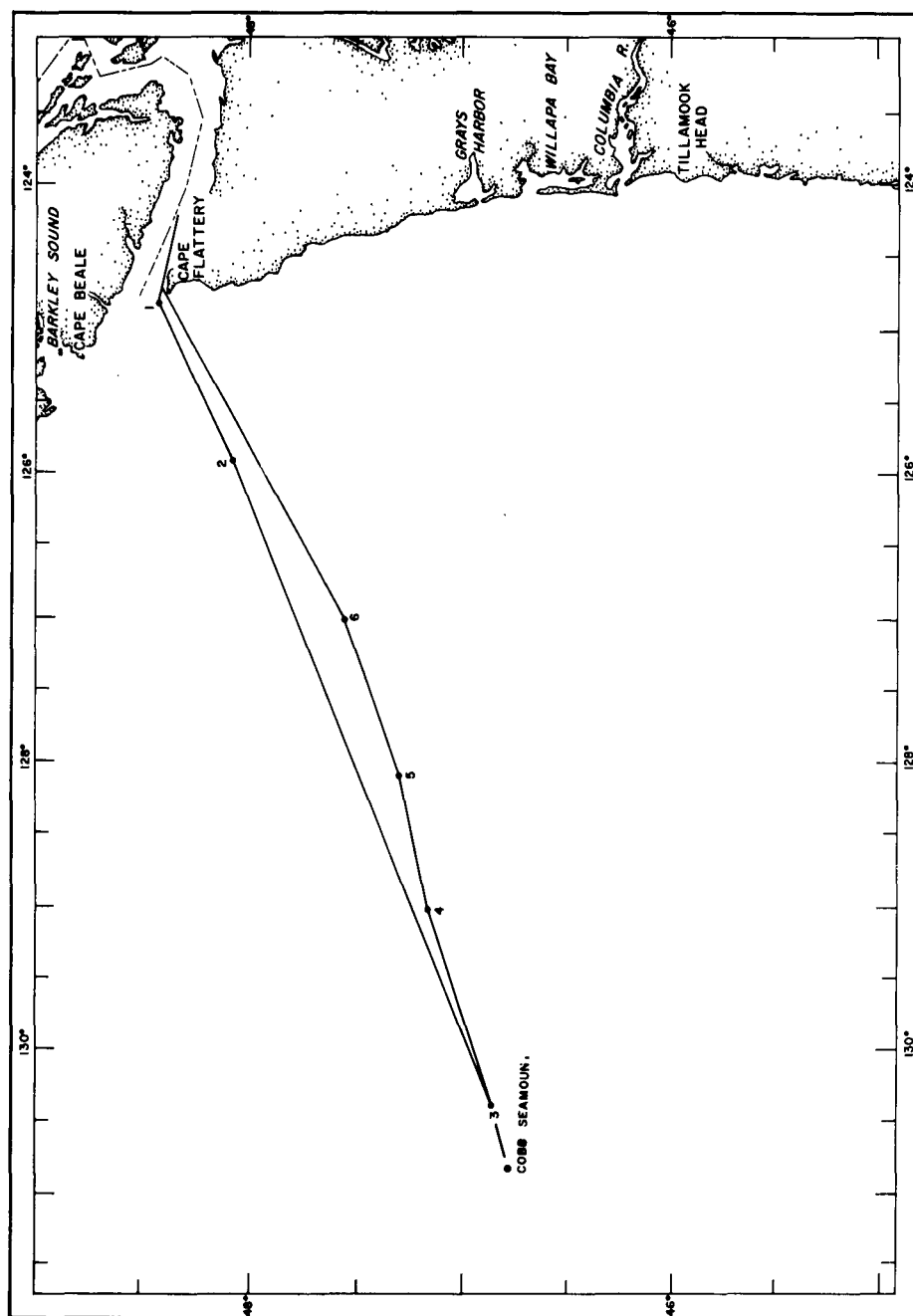


Fig. 4. Station locations Brown Bear Cruise No. 282, 3-7 April, 1961

STATION 282-001 OBSERVED VALUES													
DATE	4/04/61	HR	14	LAT	48-27N	LONG	124-48W	SDG	305	WEA	41		
SECDI	3	BA	38	CL	2	AMT	2	DRY	8.6	WET	7.5	RELHU	86
WVEL	3	DIR	05	SEA	2	DIR	05	SWL	1	DIR	35	WA	30.35.35
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	8.44	30.138	23.42	6.01	1.43	28	15.2	0.16				
	5	8.68	30.261	23.49	6.15	1.54	23	12.8					
	9	8.74	30.348	23.54	6.12	1.56	28	13.8					
A	11												
	13	8.70	30.396	23.59	6.13	1.84	37	18.0	0.27				
	17	8.70	30.423	23.61	6.12	1.73	30	15.9					
A	22								0.16				
	26	8.52	30.804	23.93	5.61	1.76	30	16.8					
	34	8.62	31.305	24.31	5.61	2.16	37	19.7					
	52	8.96	32.037	24.83	5.44	1.86	27	15.4					
	69	9.50	32.417	25.04	6.05	1.33	14	8.2					
	86	9.26	32.723	25.32	5.33	1.42	16	10.1					
	92	9.18	32.788	25.38	5.30	1.54	17	11.1					
	110	8.68	33.250	25.82	4.26	1.72	21	13.0					
	121	8.40	33.387	25.97	3.95	2.11	28	6.7					
	140	8.01	33.558	26.16	3.42	2.15	32	6.3					
	226	6.79	33.931	26.63	2.14	2.93	51	29.2					

STATION 282-001 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.44		30.138		23.42	446.9	0.000	6.01	
10	8.73	0.00	30.363	0.001	23.56	434.3	0.045	6.12	0.00
20	8.64	0.02	30.515	0.009	23.69	421.8	0.087	5.96	0.04
30	8.55	0.01	31.052	0.011	24.12	380.8	0.127	5.59	0.02
50	8.91	0.00	31.978	0.003	24.79	317.4	0.197	5.44	0.02
75	9.48	0.02	32.512	0.014	25.12	286.7	0.273	5.93	0.01
100	8.92	0.02	33.020	0.009	25.61	240.4	0.339	4.71	0.00
150	7.82	---	33.635	---	26.25	180.3	0.444	3.18	---
200	7.06	---	33.888	---	26.56	151.8	0.527	2.33	---

STATION 282-002 OBSERVED VALUES

DATE 4/04/61 HR 21 LAT 48-07N LONG 125-55W SDG 1353 WEA 02
 SECD1 BA 37 CL 6 AMT 3 DRY 9.2 WET 8.6 RELHU 93 VIS 8
 WVEL 10 DIR 32 SEA 3 DIR 32 SWL 3 DIR WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1										
A	3	9.56	32.467	25.07	6.55	1.10	10	1.5	0.11		
A	5								0.31		
									0.19		
A	1	9.56	32.472	25.07	6.55	1.19	10	2.5	0.23		
	16										
A	1	9.51	32.476	25.09	6.54	0.97	10	4.7			
	20										
A	1	9.42	32.542	25.15	6.48	1.19	11	5.7			
	30										
	32										
A	1	9.34	32.599	25.21	6.46	1.08	10	4.5	0.32		
	40										
A	1	9.19	32.633	25.26	6.27	1.20	8	5.3			
	60										
A	1	9.14	33.037	25.58	5.20	1.54	15	11.4			
	80										
	99	8.60	33.479	26.01	3.96	1.99	23	17.7			
A	1	8.12	33.734	26.28	3.30	2.28	27	20.6			
	124										
A	1	7.75	33.835	26.42	2.96	2.56	36	24.7			
	149										
A	1	7.53	33.883	26.49	2.70	2.70	40	25.8			
	173										
	198	7.14	33.918	26.57	2.37	3.02	49	31.2			

STATION 282-002 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.56		32.467		25.07	290.0	0.000	6.55	
10	9.56		32.472		25.07	289.8	0.029	6.55	
20	9.51		32.476		25.09	288.9	0.058	6.54	
30	9.42		32.542		25.15	282.8	0.087	6.48	
50	9.26	0.00	32.590	0.020	25.22	276.4	0.143	6.43	0.03
75	9.17	0.02	32.916	0.010	25.48	252.1	0.209	5.52	0.02
100	8.58	0.00	33.494	0.001	26.03	200.8	0.266	3.92	0.01
150	7.74	0.00	33.838	0.000	26.42	164.1	0.357	2.95	

STATION 282-003 OBSERVED VALUES

DATE 4/06/61 HR 06 LAT 46-52N LONG 130-23W SDG 2815 WEA 00
 SECDI BA 32 CL X AMT 9 DRY 6.9 WET 6.4 RELHU 91 VIS 6
 WVEL 15 DIR 36 SEA 3 DIR 36 SWL 9 DIR WA 15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	8.38	32.647	25.39	6.70	1.06	8	6.4	0.23	
A	1	5	8.38	32.648	25.39	6.74	1.07	8	6.8	0.06	
A	1	16	8.40	32.642	25.39	6.66	1.10	9	6.9	0.05	
A	1	19	8.38	32.643	25.39	6.68	1.12	8	7.4	0.09	
	32										
	38		8.39	32.651	25.40	6.68	1.04	8	6.6		
	58		8.32	32.664	25.42	6.59	1.10	11	8.1		
	77		8.16	32.666	25.44	6.61	1.19	11	8.0		
	96		8.03	32.748	25.52	6.36	1.18	12	8.7		
	120		7.46	33.472	26.17	5.17	1.56	24	14.6		
	144		7.48	33.718	26.36	4.60	1.67	28	17.3		
	168		7.25	33.870	26.52	4.41	1.77	33	18.9		
	192		6.96	33.913	26.59	4.13	1.65	30	16.8		

STATION 282-003 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.38		32.647		25.39	259.2	0.000	6.70	
10	8.38		32.648		25.39	259.3	0.026	6.74	
20	8.40	0.00	32.642	0.000	25.39	260.1	0.052	6.66	0.00
30	8.38	0.00	32.644	0.000	25.39	259.9	0.078	6.68	0.00
50	8.36	0.00	32.650	0.000	25.41	258.8	0.130	6.63	0.01
75	8.18	0.00	32.664	0.001	25.44	256.2	0.195	6.61	0.01
100	7.93	0.02	32.861	0.027	25.63	238.5	0.256	6.17	0.04
150	7.44	0.01	33.766	0.000	26.41	165.2	0.357	4.54	0.01

STATION 282-004 OBSERVED VALUES

DATE 4/06/61 HR 15 LAT 47-12N LONG 129-02W SDG 2560 WEA 01
 SECD1 BA 28 CL 8 AMT 7 DRY 7.9 WET 7.9 RELHU 99 VIS 6
 WVEL 13 DIR 36 SEA 4 DIR 36 SWL 3 DIR WA 30

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	8.51	32.545	25.29	6.55	0.97	6	5.2	0.17	
A	4	8	8.50	32.544	25.30	6.62	0.87	6	4.8	0.17	
A	14	8.51	32.540	25.29	6.69	0.85	7	4.1	0.19		
A	17	8.50	32.539	25.29	6.64	0.84	5	4.3	0.17		
	25										
	27										
	34	8.50	32.550	25.30	6.64	0.94	7	4.3			
	52	8.51	32.542	25.29	6.61	0.89	5	3.8			
	69	8.30	32.571	25.35	6.45	1.00	9	5.0			
	87	7.94	32.853	25.62	5.94	1.15	10	8.2			
	109	7.42	33.558	26.25	4.23	1.52	21	13.5			
	132	7.11	33.773	26.46	3.24	2.01	35	19.4			
	154	6.66	33.927	26.64	2.39	2.06	42	23.7			
	177	6.38	33.974	26.72	1.81	2.12	36	19.6			

STATION 282-004 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.51	0.00	32.545	0.000	25.29	268.6	0.000	6.55	0.00
10	8.50	0.00	32.543	0.000	25.29	268.8	0.027	6.64	0.00
20	8.51	0.00	32.539	0.000	25.29	269.3	0.054	6.67	0.01
30	8.50	0.00	32.545	0.001	25.30	268.9	0.081	6.64	0.00
50	8.51	0.00	32.543	0.001	25.29	269.6	0.135	6.62	0.00
75	8.19	0.00	32.636	0.000	25.41	258.5	0.201	6.34	0.02
100	7.62	0.01	33.275	0.036	26.00	203.5	0.259	4.96	0.08
150	6.74	0.01	33.905	0.001	26.61	145.5	0.346	2.53	0.00

STATION 282-005 OBSERVED VALUES													
DATE 4/07/61		HR 00		LAT 47-19N		LONG 128-07W		SDG 2651		WEA 01			
SECD1 BA 27		CL 2		AMT 2		DRY 9.2		WET 8.1		RELHU 87		VIS 8	
WVEL 13		DIR 36		SEA 4		DIR 36		SWL 3		DIR 36		WA 30, 12	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	8.38	32.527	25.30	6.71	0.93	11	5.7	0.13			
A	2	5	8.35	32.524	25.30	6.75	0.96	11	5.0	0.21			
A	2	18	8.38	32.525	25.30	6.82	0.87	9	5.2	0.19			
A	2	28	8.36	32.523	25.30	6.85	0.87	8	5.0	0.21			
	35												
2	38	8.33	32.528	25.31	6.78								
2	57	8.21	32.531	25.33	6.91	0.96	10	5.5					
2	75	7.76	32.661	25.50	5.93	0.96	10	6.9					
2	94	7.39	33.353	26.09	5.21	1.47	22	14.8					
2	118	7.54	33.638	26.29	3.76								
2	141	7.26	33.799	26.46	3.82	1.68	28	19.7					
2	165	6.87	33.861	26.56	3.98	1.76	26	17.7					
1	243	5.74	33.898	26.74	3.28	1.74	41	18.8					
1	420	4.50	34.016	26.97	1.31	2.27	72	26.9					
1	656	3.83	34.196	27.19	0.74	2.80	94	37.0					

STATION 282-005 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	8.38		32.527		25.30	268.1	0.000	6.71	
10	8.35		32.524		25.30	268.1	0.027	6.75	
20	8.38	0.00	32.525	0.000	25.30	268.6	0.054	6.83	0.00
30	8.36	0.00	32.524	0.000	25.30	268.5	0.081	6.84	0.01
50	8.28	0.01	32.522	0.006	25.31	267.8	0.135	6.91	0.06
75	7.76		32.661		25.50	250.6	0.199	5.93	
100	7.42	0.04	33.461	0.017	26.17	186.8	0.254	4.80	0.07
150	7.12	0.00	33.820	0.003	26.50	156.1	0.340	3.88	0.01
200	6.33	0.01	33.893	0.011	26.66	141.8	0.414	3.79	0.07
250	5.67	0.01	33.902	0.000	26.75	133.5	0.483	3.19	0.01
300	5.21	0.04	33.933	0.001	26.83	126.3	0.548	2.60	0.07
400	4.58	0.02	34.001	0.001	26.95	115.1	0.669	1.51	0.03
500	4.15	---	34.074	---	27.06	105.7	0.779	0.85	---
600	3.89	---	34.151	---	27.14	98.0	0.881	0.66	---

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STATION 282-006			OBSERVED VALUES													
DATE	4/07/61	HR 02	LAT 47-34N	LONG 127-01W	SDG 2468	WEA 03										
SECDI	BA	CL X	AMT 9	DRY 8.6	WET 7.9	RELHU 87	VIS									
WVEL	DIR	SEA 4	DIR	SWL 3	DIR	WA 30.15										
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S					
1	0	8.82	32.575	25.27	6.64	0.94	10	5.1								
1	10	8.80	32.571	25.27	6.65	1.02	10	5.7								
1	19	8.82	32.571	25.27	6.66	0.88	9	4.8								
1	28	8.80	32.578	25.28	6.57	1.02	11	5.5								
1	37	8.76	32.575	25.28	6.61	1.10	11	5.9								
1	56	8.74	32.577	25.28	6.57	0.96	9	5.4								
1	75	8.69	32.591	25.30	6.48	0.95	10	5.4								
1	93	8.08	33.264	25.92	4.69	1.52	20	13.8								
1	117	7.76	33.567	26.21	3.89	1.91	31	19.2								
1	140	7.76	33.765	26.36	3.15	2.05	36	16.1								
1	164	7.56	33.868	26.47	2.86	2.21	39	22.3								
1	188	7.28	33.899	26.53	2.83	2.17	39	22.4								
1	240	6.86	33.945	26.63	2.45	2.02	35	19.0								
1	412	5.61	34.084	26.90	1.19	2.38	64	24.6								
1	642	4.48	34.245	27.16	0.50	2.80	78	31.8								

STATION 282-006 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	8.82		32.575		25.27	270.9	0.000	6.64	
10	8.80		32.571		25.27	271.0	0.028	6.65	
20	8.82	0.00	32.572	0.000	25.27	271.4	0.055	6.65	0.00
30	8.79	0.00	32.578	0.000	25.28	270.8	0.082	6.57	0.00
50	8.74	0.00	32.575	0.000	25.28	270.6	0.136	6.59	0.00
75	8.69		32.591		25.30	269.0	0.203	6.48	
100	7.94	0.01	33.393	0.020	26.04	199.1	0.262	4.36	0.06
150	7.69	0.01	33.819	0.001	26.41	164.8	0.353	2.98	0.01
200	7.17	0.01	33.911	0.001	26.56	151.5	0.432	2.76	0.01
250	6.78	0.00	33.954	0.000	26.65	143.8	0.506	2.37	0.01
300	6.39	0.01	33.996	0.000	26.73	136.3	0.576	1.97	0.02
400	5.69	0.00	34.075	0.000	26.88	122.7	0.705	1.27	0.01
500	5.10	----	34.149	-----	27.01	111.2	0.822	0.79	----
600	4.64	----	34.218	-----	27.12	101.6	0.929	0.54	----

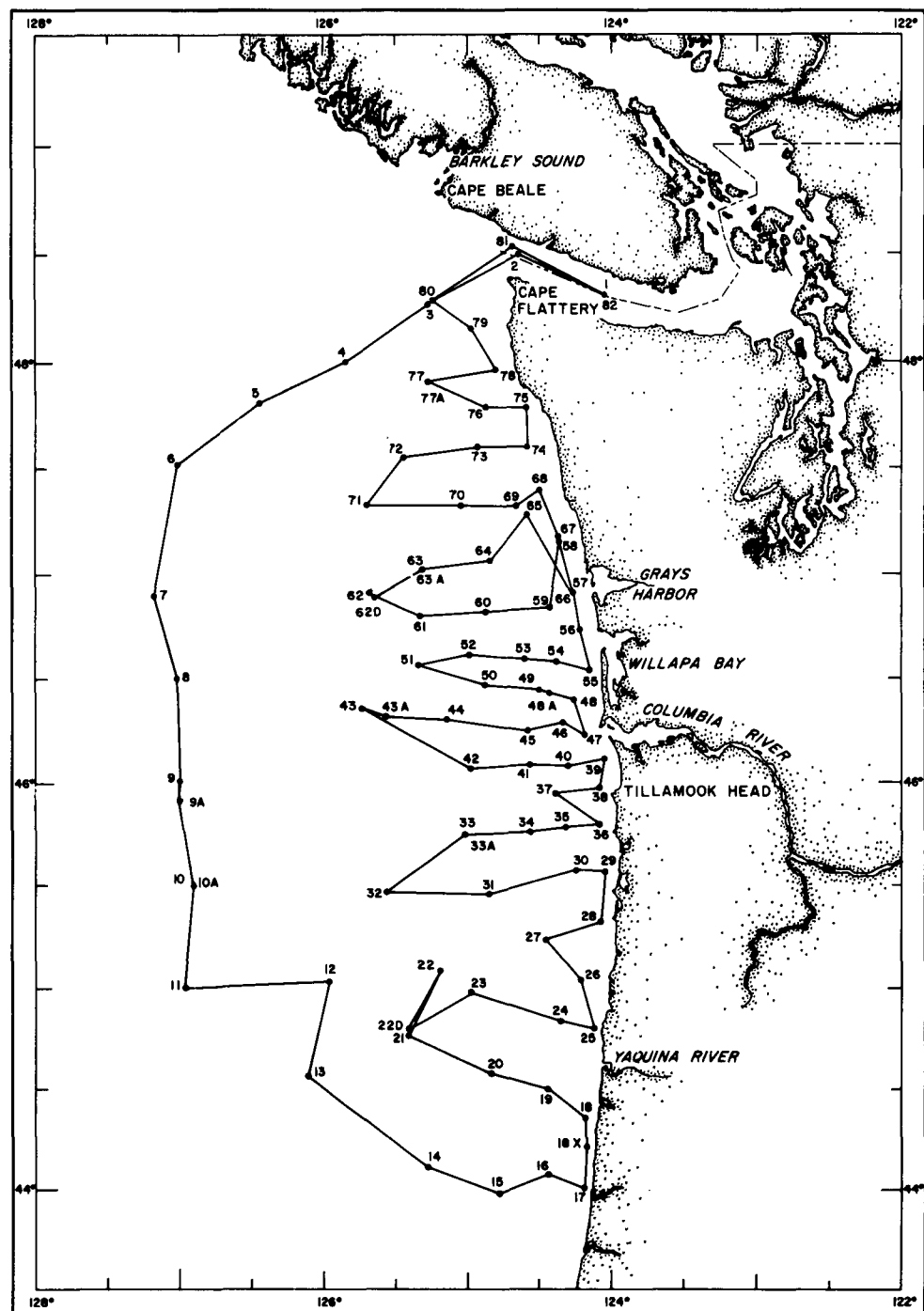


Fig. 5. Station locations Brown Bear Cruise No. 287, 8-24 May, 1961.

STATION 287-001 OBSERVED VALUES

DATE 5/09/61 HR 05 LAT 48-18N LONG 124-03W SDG 186 WEA 60
 SECDI BA 11 CL 6 AMT 3 DRY 10.1 WET 8.9 RELHU 86 VIS 8
 WVEL 3 DIR 12 SEA 1 DIR 17 SWL 0 DIR WA 07

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.14	30.978	23.98	5.79				2.05	19.13	
P	3	9.09	30.988	23.99	5.76				2.88	19.78	
A	6	9.02	31.060	24.06	5.63						
A	10	8.79	31.264	24.25	5.14						
A	11										
A	15	8.49	31.366	24.38	4.91				1.54	12.52	
A	20	8.35	31.453	24.46	4.72						
A	22										
A	25	8.33	31.538	24.53	4.64				0.68	5.76	
A	30	8.10	31.797	24.77	4.48						
A	40	7.96	32.285	25.17	3.95						
A	60	7.83	32.659	25.48	3.75						
A	80	7.51	33.114	25.89	3.25						
A	99	7.39	33.531	26.23	2.86						
A	124	6.88	33.864	26.56	2.15						
A	149	6.86	33.865	26.57	2.13						
A	174	6.85	33.863	26.57	2.07						

STATION 287-001 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.14		30.978		23.98	394.3	0.000	5.79	
10	8.79		31.264		24.25	368.1	0.039	5.14	
20	8.35		31.453		24.46	347.9	0.074	4.72	
30	8.10		31.797		24.77	319.0	0.108	4.48	
50	7.89	0.02	32.517	0.037	25.36	262.8	0.166	3.80	0.06
75	7.59	0.01	32.997	0.003	25.78	223.3	0.227	3.38	0.01
100	7.37	0.01	33.540	0.001	26.25	179.5	0.277	2.83	0.01
150	6.86	---	33.865	---	26.57	150.0	0.359	2.13	---

STATION 287-002 OBSERVED VALUES

DATE 5/09/61 HR 10 LAT 48-30N LONG 124-39W SDG 214 WEA 60
 SECD1 BA 82 CL X AMT 9 DRY 9.9 WET 8.9 RELHU 88 VIS 7
 WVEL 2 DIR 09 SEA 0 DIR 09 SWL 1 DIR WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.76	30.681	23.65	6.17	1.36	30	9.8			
1	3	9.74	30.669	23.64	6.14	1.14	18	10.7			
1	6	9.69	30.854	23.79	6.07	1.32	29	6.1			
1	10	9.31	30.966	23.94	5.79	1.66	35	8.8			
1	15	9.01	31.012	24.02	5.63	1.65	32	14.1			
1	20	8.80	31.069	24.10	5.41	1.93	38	14.1			
1	25	8.58	31.127	24.18	5.15	2.02	41	15.6			
1	30	8.36	31.288	24.33	4.79	2.19	44	14.0			
1	40	8.34	31.549	24.54	4.70	2.11	44	21.6			
1	60	7.91	32.254	25.16	3.92	2.19	48	21.0			
1	80	7.84	33.129	25.85	3.48	2.21	43	22.4			
1	100	7.50	33.669	26.32	2.81	2.24	41	22.0			
1	125	7.07	33.809	26.49	2.32	2.60	33	26.4			
1	150	7.00	33.831	26.52	2.28	2.52	54	27.8			
1	175	6.80	33.920	26.62	2.12	2.75	57	28.1			

STATION 287-002 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.76		30.681		23.65	425.6	0.000	6.17	
10	9.31		30.966		23.94	397.8	0.042	5.79	
20	8.80		31.069		24.10	382.9	0.081	5.41	
30	8.36		31.288		24.33	360.5	0.118	4.79	
50	8.13	0.04	31.876	0.003	24.83	313.9	0.185	4.34	0.05
75	7.85	0.02	32.918	0.016	25.68	232.8	0.254	3.58	0.02
100	7.50		33.669		26.32	172.5	0.304	2.81	
150	7.00		33.831		26.52	154.4	0.386	2.28	

STATION 287-02A OBSERVED VALUES

DATE	5/09/61	HR	13	LAT	48-22N	LONG	125-02W	SDG	RELHU	WEA	VIS
SECDI	BA	CL		AMT	DRY	DIR	WET	WA			
WVEL	DIR	SEA		DIR	SWL	DIR					
	DEPTH									CHL-A	PROD-I
										1.27	14.01
											PROD-S
											157.76

A

STATION 287-003 OBSERVED VALUES

DATE 5/09/61 HR 15 LAT 48-16N LONG 125-17W SDG 173 WEA 01
 SECDI BA 10 CL 6 AMT 2 DRY 10.6 WET 9.8 RELHU 91 VIS 7
 WVEL 8 DIR 16 SEA 4 DIR 16 SWL 1 DIR 14 WA 17.17

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.20	30.819	23.68	6.54						
2	0	10.24	30.827	23.68	6.57						
2	3	10.23	30.826	23.68	6.57						
2	6	10.23	30.835	23.69	6.58						
1	10	10.18	30.820	23.69	6.51						
1	29	9.87	31.184	24.02	6.25						
1	48	8.44	32.323	25.13	4.56						
1	67	8.16	32.602	25.39	4.22						
2	91	7.77	33.390	26.07	3.14						
2	115	7.23	33.789	26.46	2.43						

STATION 287-003 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.22		30.823		23.68	422.2	0.000	6.55	
10	10.18		30.820		23.69	421.9	0.043	6.51	
20	10.09	0.04	30.918	0.002	23.78	413.4	0.084	6.45	0.06
30	9.79	0.02	31.245	0.014	24.08	384.7	0.124	6.16	0.02
50	8.38	0.02	32.365	0.018	25.17	281.0	0.191	4.50	0.03
75	8.04	0.00	32.859	0.032	25.61	239.8	0.256	3.88	0.04
100	7.59	---	33.585	---	26.25	179.9	0.309	2.83	---

STATION 287-004										OBSERVED VALUES									
DATE	5/09/61	HR	21	LAT	48-00N	LONG	125-51W	SDG	1317	WEA									
SECDI	BA	08	CL	AMT	DRY	WET	RELHU	WA	15, 14	VIS									
WVEL	7	DIR	14	SEA	SWL	DIR													
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S								
P	2	0	10.28	31.638	24.31	6.45													
	2	10	10.13	31.648	24.34	6.47			0.75	6.09 9.87	64.34 21.60								
P	2	20	9.82	31.854	24.55	6.41													
	2	30	9.10	32.438	25.12	6.47													
A	2	40	8.84	32.557	25.25	6.39			0.61	6.41	13.42								
	2	41																	
A	2	60	8.55	32.727	25.43	5.83													
	2	80	8.50	33.345	25.92	4.18													
A	2	100	8.15	33.607	26.18	3.70													
	2	125	7.78	33.736	26.34	3.43													
A	2	150	7.54	33.852	26.46	2.88													
	2	175	7.33	33.917	26.54	2.56													
A	1	190	7.11	33.958	26.60	2.35													
	1	287	6.06	34.027	26.80	1.61													
A	1	481	5.01	34.137	27.01	0.78													
	1	727	4.13	34.284	27.23	0.35													
A	1	1020	3.33	34.435	27.43	0.41													

STATION 287-004 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.28		31.638		24.31	362.7	0.000	6.45	
10	10.13		31.648		24.34	359.8	0.037	6.47	
20	9.82		31.854		24.55	339.8	0.072	6.41	
30	9.10		32.438		25.12	285.7	0.103	6.47	
50	8.66	0.00	32.610	0.022	25.33	266.1	0.158	6.21	0.02
75	8.52	0.02	33.186	0.025	25.80	222.3	0.219	4.59	0.07
100	8.15		33.607		26.18	186.2	0.270	3.70	
150	7.54		33.852		26.46	160.2	0.357	2.88	
200	6.98	0.00	33.973	0.005	26.63	144.3	0.433	2.24	0.01
250	6.40	0.01	34.021	0.013	26.75	133.9	0.502	1.82	0.03
300	5.96	0.01	34.035	0.000	26.82	127.9	0.568	1.53	0.00
400	5.34	0.04	34.093	0.002	26.94	117.2	0.690	1.05	0.02
500	4.93	0.00	34.149	0.000	27.03	109.2	0.804	0.73	0.00
600	4.54	0.01	34.209	0.001	27.12	101.1	0.909	0.50	0.01
700	4.21	0.01	34.268	0.000	27.20	93.8	1.006	0.37	0.00
800	3.91	---	34.324	---	27.28	87.0	1.097	0.31	---
1000	3.38	---	34.426	---	27.41	75.0	1.259	0.39	---

M M

STATION 287-005 OBSERVED VALUES													
DATE	5/10/61	HR	06	LAT	47-48N	LONG	126-26W	SDG	2195	WEA	03		
SECD1	BA	06	CL	6	AMT	6	DRY	10.3	WET	8.9	RELHU	84	Vis
WVEL	3	DIR	18	SEA	DIR	1	SWL	1	DIR	20	WA	14	10
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	3	0	10.33	31.868	24.48	6.51			0.48	3.40			
A	3	9							0.43	3.35			
	3	10	10.29	31.873	24.49	6.51							
A	3	20	10.04	31.890	24.54	6.56			0.82	3.08			
	3	28	8.94	32.550	25.23	6.47							
	3	30	8.59	32.562	25.30	6.40							
	3	39											
A	3	57							0.08	0.13			
	3	58	8.92	33.193	25.74	4.37							
	3	77	8.42	33.537	26.08	3.54							
	3	96	8.12	33.732	26.28	3.01							
	3	120	7.89	33.804	26.37	2.69							
	3	144	7.59	33.861	26.46	2.36							
	3	168	7.47	33.903	26.51	2.11							
	3	192	7.26	33.927	26.56	1.91							
	2	290	6.66	33.985	26.69	1.75							
	2	487	5.36	34.077	26.92	1.03							
	2	632	4.21	34.244	27.19	0.37							
	2	1031	3.44	34.410	27.40	0.42							
	2	1579	2.37	34.544	27.60	0.91							
	2	1977	1.90	34.606	27.69	1.50							

STATION 287-005 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	10.33		31.868		24.48	346.5	0.000	6.51	
10	10.29		31.873		24.49	345.6	0.035	6.51	
20	10.04		31.880		24.54	340.6	0.069	6.56	
30	8.94		32.540		25.23	275.0	0.100	6.47	
50	8.74	0.09	32.895	0.045	25.53	246.8	0.152	5.31	0.15
75	8.49	0.02	33.511	0.002	26.05	197.8	0.208	3.59	0.01
100	8.08	0.01	33.751	0.004	26.30	174.5	0.254	2.94	0.01
150	7.56	0.01	33.873	0.000	26.48	158.9	0.338	2.29	0.00
200	7.20	0.01	33.933	0.001	26.57	150.3	0.415	1.88	0.01
250	6.88	0.02	33.966	0.002	26.64	144.3	0.489	1.76	0.05
300	6.60	0.00	33.988	0.002	26.70	139.6	0.560	1.72	0.00
400	5.96	0.01	34.029	0.008	26.81	129.6	0.694	1.39	0.01
500	5.25	0.01	34.091	0.002	26.95	117.3	0.818	0.97	0.01
600	4.45	0.02	34.206	0.004	27.13	100.3	0.927	0.50	0.01
700	3.95	0.08	34.280	0.009	27.25	89.3	1.021	0.27	0.06
800	3.67	0.14	34.344	0.015	27.32	82.9	1.107	0.21	0.10
1000	3.44	0.04	34.406	0.004	27.39	77.1	1.267	0.36	0.03
1200	3.08	0.02	34.460	0.002	27.47	70.5	1.415	0.53	0.00
1500	2.51	0.01	34.520	0.001	27.58	60.5	1.611	0.81	0.00

M M M M

STATION 287-006 OBSERVED VALUES

DATE 5/10/61 HR 13 LAT 47-31N LONG 127-01W SDG 2377 WEA 02
 SECD 1 27 BA 04 CL AMT X DRY 10.0 WET 8.3 RELHU 80 VIS 7
 WVEL 7 DIR 15 SEA 3 DIR 15 SWL 1 DIR WA 20.12.02

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	3	10.02	32.568	25.07	6.51	1.03	10	2.0	0.05	1.68	11.80
A	10	10.02	32.573	25.08	6.53	1.11	11	1.9	0.22	1.66	
	11										
A	3	9.58	32.533	25.12	6.59	1.03	11	2.3	0.12	1.03	
	27										
	30	9.50	32.547	25.14	6.61	1.01	11	2.8			
	40	8.87	32.547	25.24	6.62	1.09	13	3.9			
A	3	8.32	32.577	25.35	6.55	1.18	15	5.3	0.07	0.31	
	60										
	73										
	80	7.78	32.794	25.60	6.02	1.39	19	9.7			
	100	8.36	33.544	26.10	3.75	2.20	36	20.8			
	125	7.96	33.749	26.32	3.15	2.30	43	23.1			
	150	7.60	33.847	26.45	3.07	2.35	45	22.8			
	164	7.49	33.876	26.49	2.69	2.45	48	25.3			
	345	5.85	34.018	26.82	1.46	2.80	78	31.3			
	587	4.64	34.193	27.10	0.48	3.35	107	35.7			
	871	3.80	34.340	27.30	0.31	3.33	137	36.0			
	1402	2.76	34.501	27.53	0.60	3.32	156	34.0			
	2035	1.88	34.608	27.69	1.60	3.17	185	33.8			

STATION 287-006 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.02		32.568		25.07	289.7	0.000	6.51	
10	10.02		32.573		25.08	289.5	0.029	6.53	
20	9.58		32.533		25.12	285.8	0.058	6.59	
30	9.50		32.547		25.14	283.7	0.087	6.61	
50	8.54	0.04	32.548	0.006	25.29	269.6	0.142	6.62	0.01
75	7.86	0.03	32.706	0.011	25.52	248.7	0.207	6.26	0.04
100	8.36		33.544		26.10	193.9	0.262	3.75	
150	7.60		33.847		26.45	161.4	0.351	3.07	
200	7.15	0.03	33.922	0.011	26.57	150.5	0.429	2.16	0.17
250	6.70	0.04	33.971	0.018	26.67	141.4	0.502	1.65	0.27
300	6.25	0.03	34.003	0.013	26.76	133.9	0.571	1.43	0.20
400	5.51	0.02	34.061	0.001	26.89	121.6	0.698	1.17	0.00
500	4.98	0.03	34.134	0.001	27.01	110.9	0.815	0.74	0.00
600	4.59	0.00	34.201	0.000	27.11	102.3	0.921	0.46	0.01
700	4.26	0.02	34.258	0.001	27.19	95.1	1.020	0.34	0.03
800	3.97	0.01	34.308	0.001	27.26	88.9	1.112	0.29	0.03
1000	3.50	0.01	34.389	0.003	27.37	79.1	1.280	0.32	0.01
1200	3.10	0.02	34.452	0.003	27.46	71.2	1.430	0.41	0.01
1500	2.60	---	34.524	---	27.56	61.9	1.630	0.71	---
2000	1.92	---	34.604	---	27.68	50.3	1.911	1.53	---

STATION 287-007 OBSERVED VALUES

DATE 5/10/61 HR 22 LAT 46-53N LONG 127-12W SDG 2606 WEA 02
SECDI BA 05 CL 6 AMT 4 DRY 10.4 WET 8.6 RELHU 85 VIS 8
WVEL 2 DIR 03 SEA 2 DIR 03 SWL 1 DIR WA 08, 07

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	2	0	10.71	32.576	24.95	6.46	0.84	14	3.8	0.00	2.54	17.28
	2	10	10.19	32.573	25.05	6.56	0.89	12	3.7	0.00	2.81	15.94
A	2	20	10.10	32.585	25.07	6.59						
	2	30	10.03	32.586	25.09	6.61						
	2	34										
A	2	40	9.72	32.618	25.16	6.56	0.89	12	3.7	0.05	2.78	5.94
	2	60	9.24	32.871	25.44	5.57						
	2	68										
A	2	80	8.73	33.513	26.02	3.89	1.40	22	12.8	0.00	0.27	0.04
	2	100	8.42	33.682	26.20							
	2	124	8.20	33.795	26.32	3.03						
2	2	148	7.99	33.856	26.40	2.69						
	2	173	7.81	33.895	26.46	2.62						
	2	197	7.53	33.926	26.52	1.70*						
1	1	292	6.57	34.005	26.71	1.94*						
	1	488	5.30	34.115	26.96	0.86						
	1	732	4.31	34.286	27.21	0.37						
1	1	1026	3.49	34.419.	27.40	0.41						
	1	1565	2.45	34.541	27.59	0.87						
	1	2035	1.87	34.615	27.70	1.59						

STATION 287-007 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.71		32.576		24.96	300.3	0.000	6.46	
10	10.19		32.573		25.05	292.2	0.030	6.56	
20	10.10		32.585		25.07	290.1	0.059	6.59	
30	10.03		32.586		25.09	289.1	0.088	6.61	
50	9.47	0.01	32.704	0.006	25.27	271.9	0.144	6.18	0.02
75	8.85	0.01	33.356	0.027	25.88	214.6	0.205	4.30	0.05
100	8.42		33.682		26.20	184.5	0.255	3.24	0.15
150	7.98	0.00	33.850	0.000	26.40	165.8	0.343	2.70	0.01
200	7.50	0.00	33.929	0.000	26.53	154.7	0.423	1.66	0.03
250	6.97	0.00	33.975	0.002	26.64	144.7	0.498	1.48	0.28
300	6.50	0.00	34.000	0.001	26.73	136.7	0.568	1.91	0.02
400	5.78	0.02	34.069	0.004	26.87	124.4	0.698	1.44	0.11
500	5.24	0.00	34.124	0.001	26.97	114.8	0.818	0.82	0.00
600	4.79	0.02	34.195	0.004	27.08	105.1	0.928	0.55	0.02
700	4.41	0.01	34.264	0.002	27.18	96.5	1.029	0.39	0.01
800	4.09	0.01	34.322	0.001	27.26	89.3	1.122	0.34	0.02
1000	3.55	0.00	34.400	0.000	27.38	78.2	1.289	0.39	0.01
1200	3.10	0.01	34.469	0.004	27.47	70.0	1.437	0.51	0.00
1500	2.55	0.00	34.532	0.002	27.57	60.8	1.633	0.79	0.00
2000	1.90	---	34.611	---	27.69	49.6	1.909	1.53	---

M M M M

STATION 287-008 OBSERVED VALUES

DATE	5/11/61	HR	04	LAT	46-29N	LONG	127-01W	SDG	2654	WEA	02			
SECD1	BA	09	CL	6	AMT	3	DRY	11.1	WET	9.7	RELHU	82	VIS	8
WVEL	4	DIR	36	SEA	2	DIR	36	SWL	2	DIR	20	WA	05	12
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	2	0	10.55	32.488	24.92	6.45	0.85	9	1.1	0.13	1.00			
	10	10.36	32.491	24.96	6.50	0.85	9	1.8	0.13	1.52				
A	2	20	10.27	32.492	24.97	6.52	0.86	12	2.1					
	29	10.18	32.492	24.99	6.52	0.88	9	2.0						
A	2	35												
	39	9.83	32.538	25.08	6.52	1.00	11	2.9	0.11	0.76				
A	2	59	9.29	32.583	25.20	6.37	1.04	14	4.9					
	71													
A	2	78	8.48	32.928	25.60	5.21	1.53	21	14.2		0.16			
	98	7.94	33.448	26.09	4.07	2.00	35	21.3	0.14					
2	118	7.51	33.753	26.39	3.43	2.20	43	24.8						
	142	7.29	33.832	26.48	3.08	2.30	46	26.1						
2	166	7.09	33.906	26.57	2.75	2.44	53	24.2						
	190	6.79	33.934	26.63	2.62	2.52	55	36.0						
1	294	6.06	34.012	26.79	1.68	2.86	74	36.0						
	492	5.05	34.133	27.00	0.73	3.26	106	41.5						
1	739	4.05	34.314	27.26	0.31	3.42	136	43.5						
	1035	3.31	34.447	27.44	0.39	3.44	156	36.4						
1	1583	2.26	34.555	27.62	0.91	3.27	189	33.0						
	2056	1.84	34.618	27.70	1.72	3.14	204	26.2						

STATION 267-008 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.55		32.488		24.92	304.1	0.000	6.45	
10	10.36		32.491		24.96	301.0	0.031	6.50	
20	10.27		32.492		24.97	299.7	0.061	6.52	
30	10.15	0.00	32.496	0.001	25.00	297.7	0.091	6.52	0.00
50	9.54	0.02	32.546	0.016	25.14	284.7	0.149	6.52	0.04
75	8.61	0.01	32.859	0.003	25.53	247.9	0.215	5.42	0.02
100	7.89	0.00	33.488	0.000	26.13	191.3	0.270	3.99	0.00
150	7.23	0.00	33.859	0.002	26.51	155.4	0.357	2.96	0.01
200	6.70	0.01	33.943	0.001	26.65	142.8	0.432	2.54	0.01
250	6.30	0.03	33.984	0.002	26.73	135.4	0.501	2.10	0.04
300	6.02	0.00	34.016	0.000	26.79	130.1	0.568	1.64	0.00
400	5.48	0.01	34.078	0.002	26.91	119.9	0.693	1.07	0.02
500	5.01	0.00	34.139	0.001	27.01	110.9	0.808	0.71	0.00
600	4.57	0.00	34.214	0.004	27.12	101.1	0.914	0.47	0.02
700	4.19	0.00	34.286	0.002	27.22	92.2	1.011	0.33	0.01
800	3.87	0.01	34.347	0.001	27.30	84.9	1.099	0.29	0.01
1000	3.38	0.01	34.435	0.001	27.42	74.3	1.258	0.36	0.01
1200	2.94	0.01	34.491	0.005	27.51	66.5	1.399	0.50	0.00
1500	2.39	0.00	34.546	0.003	27.60	57.9	1.586	0.80	0.00
2000	1.87	---	34.612	---	27.69	49.1	1.853	1.61	---

M M M M

STATION 287-009												OBSERVED VALUES											
DATE		5/11/61		HR 11		LAT 46-00N		LONG 127-00W		SDG 2743		WEA 02											
SECDI	WVEL	5 DIR	30 DIR	SEA 2	CL X	AMT 2	DRY	WET	WA 05, 08	RELHU	VIS 8												
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S												
2	0	9.79	32.522	25.08	6.61																		
2	10	9.74	32.525	25.09	6.59																		
2	20	9.74	32.523	25.08	6.61																		
2	30	9.50	32.530	25.13	6.61																		
2	40	9.44	32.529	25.14	6.63																		
2	59	8.50	32.551	25.30	6.61																		
2	79	8.06	32.803	25.56	5.92																		
2	99	7.81	33.260	25.96	5.05																		
2	124	7.53	33.660	26.31	3.76																		
2	149	7.30	33.794	26.45	4.11																		
2	173	7.16	33.869	26.53	3.81																		
2	198	6.76	33.900	26.61	3.25																		
1	299	5.78	33.974	26.79	2.01																		
1	496	5.02	34.169	27.04	0.61																		
1	745	3.96	34.311	27.26	0.34																		
1	1044	3.38	34.436	27.42	0.39																		
1	1590	2.28	34.555	27.61	0.94																		
1	2066	1.84	34.618	27.70	1.69																		

STATION 287-009 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.79		32.522		25.08	289.5	0.000	6.61	
10	9.74		32.525		25.08	288.7	0.029	6.59	
20	9.74		32.523		25.08	289.0	0.058	6.61	
30	9.50		32.520		25.13	284.9	0.087	6.61	
50	8.98	0.07	32.525	0.008	25.21	277.8	0.143	6.66	0.02
75	8.12	0.01	32.735	0.001	25.50	250.1	0.209	6.09	0.01
100	7.80	0.00	33.280	0.000	25.98	205.5	0.266	4.98	0.01
150	7.30	0.00	33.798	0.000	26.45	160.9	0.358	4.11	0.00
200	6.73	0.00	33.902	0.000	26.61	146.4	0.435	3.22	0.00
250	6.17	0.03	33.942	0.004	26.72	136.7	0.505	2.49	0.05
300	5.77	0.00	33.975	0.000	26.79	130.0	0.572	2.00	0.00
400	5.30	0.07	34.074	0.006	26.93	118.0	0.696	1.14	0.01
500	5.00	0.00	34.172	0.000	27.04	108.3	0.809	0.60	0.00
600	4.55	0.03	34.237	0.003	27.14	99.1	0.913	0.38	0.06
700	4.14	0.02	34.291	0.002	27.23	91.2	1.008	0.32	0.03
800	3.83	0.02	34.337	0.000	27.30	85.1	1.096	0.33	0.01
1000	3.44	0.02	34.420	0.000	27.40	76.1	1.257	0.36	0.00
1200	3.04	0.02	34.470	0.003	27.49	68.5	1.402	0.50	0.01
1500	2.44	0.02	34.542	0.002	27.59	58.8	1.593	0.82	0.01
2000	1.87	---	34.612	---	27.69	49.2	1.863	1.57	---

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STATION 287-09A OBSERVED VALUES

DATE 5/11/61 HR 13 LAT 45-54N LONG 127-00W SDG WEA
 SECD: BA DIR AMT DRY WET VIS
 WVEL DIR SEA SWL DIR WA

DEPTH

CHL-A PROD-I PROD-S
 0.26 2.81 22.12

A

STATION 287-010 OBSERVED VALUES

DATE 5/11/61 HR 18 LAT 45-29N LONG 126-55W SDG 2743 WEA
SECDI BA 19 CL AMT DRY 10.6 WET 10.0 RELHU 94 VIS
WVEL 7 DIR 31 SEA 1 DIR 31 SWL DIR WA 14, 30

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	9.91	32.633	25.14	6.59				0.08	1.69	
	2	10	9.87	32.625	25.14	6.52				0.06	1.75	
A	2	19	9.85	32.624	25.15	6.55						
	2	29	9.81	32.624	25.15	6.50						
	2	33								0.13	1.19	
A	2	39	9.82	32.630	25.15	6.50						
	2	58	9.68	32.759	25.28	6.44						
	2	67										
A	3	78	9.29	32.787	25.36	6.15				0.27	0.36	
	3	93	7.73	33.232	25.95	5.12						
	3	115	7.65	33.657	26.29	4.20						
3	139	7.34	33.803	26.45	3.75							
3	162	7.04	33.877	26.55	3.33							
3	200	6.73	33.920	26.63	3.25							
3	244	6.13	33.954	26.73	2.41							
3	425	5.07	34.085	26.96	1.18							
3	651	4.04	34.288	27.24	0.37							
3	935	3.69	34.383	27.35	0.36							
3	1418	2.60	34.523	27.56	0.64							
3	1880	1.98	34.607	27.68	1.57							

STATION 287-010 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	9.91		32.633		25.14	283.1	0.000	6.59	
10	9.87		32.525		25.14	283.3	0.029	6.52	
20	9.85	0.00	32.624	0.000	25.15	283.2	0.057	6.55	0.00
30	9.81	0.00	32.624	0.001	25.15	282.8	0.085	6.50	0.00
50	9.77	0.00	32.701	0.010	25.22	276.7	0.141	6.48	0.01
75	9.42	0.04	32.766	0.016	25.33	267.0	0.209	6.24	0.02
100	7.57	0.10	33.397	0.000	26.10	193.7	0.267	4.76	0.01
150	7.19	0.00	33.845	0.001	26.50	156.0	0.354	3.53	0.01
200	6.73		33.910		26.63	145.0	0.430	3.25	
250	6.08	0.01	33.958	0.000	26.74	134.4	0.499	2.34	0.02
300	5.67	0.07	33.994	0.002	26.82	127.3	0.565	1.81	0.11
400	5.14	0.04	34.066	0.001	26.94	116.7	0.687	1.23	0.06
500	4.67	0.01	34.156	0.006	27.07	105.6	0.798	0.83	0.00
600	4.23	0.01	34.245	0.005	27.18	94.8	0.898	0.49	0.00
700	3.95	0.03	34.311	0.004	27.27	87.6	0.989	0.32	0.02
800	3.80	0.05	34.340	0.007	27.31	83.9	1.075	0.29	0.04
1000	3.55	0.02	34.404	0.001	27.38	78.5	1.238	0.37	0.01
1200	3.10	0.04	34.465	0.001	27.47	70.3	1.387	0.45	0.01
1500	2.46	---	34.541	---	27.59	59.0	1.581	0.76	---

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STATION 287-010A OBSERVED VALUES

DATE	5/11/61	HR	19	LAT	45-29N	LONG	126-55W	SDG	WEA
SECDI	22	BA	20	AMT	8	DIR	WET	RELHU	VIS
WVEL	7	DIR	32	SEA	DIR	SWL	DIR	WA	
	DEPTH								
	0						PHOS.	SIL.	NITR.
	9						0.92	11	4.7
	30						0.92	12	4.2
	60						1.00	8	4.3
							0.84	9	4.1
								CHL-A	PROD-I
								0.17	1.35
								0.20	1.50
								0.26	1.39
								0.31	0.36
									PROD-S
									10.70
									11.80
									3.58

STATION 287-011 OBSERVED VALUES														
DATE	5/12/61	HR	05	LAT	45-00N	LONG	126-59W	SDG	2743	WEA	03			
SECD1	BA	24	CL	6	AMT	1	DRY	10.0	WET	8.6	RELHU	93	VIS	7
WVEL	8	DIR	31	SEA	1	DIR	03	SWL	1	DIR	WA	18	05	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	2	0	10.58	32.752	25.12	6.47	0.85	7	0.8	0.23	1.18			
	2	8	10.56	32.748	25.12	6.45	0.85	8	0.4	0.19	1.12			
A	2	10												
	2	20	10.60	32.749	25.12	6.43	0.84	8	0.0					
A	2	26												
	2	30	10.50	32.763	25.14	6.45	0.84	7	1.3	1.22				
A	2	40	10.42	32.757	25.15	6.45	0.87	8	1.9					
A	53													
	2	60	9.94	32.762	25.24	6.43	0.91	9	2.3	0.92				
2	80	9.48	32.777	25.32	6.32	0.94	0.94	9	3.4					
	2	100	8.68	33.056	25.67	5.59	1.34	17	10.1					
2														
	2	121	8.05	33.470	26.09	4.95	1.48	24	12.8					
2	146	7.68	33.690	26.31	4.46	1.82	1.82	33	17.7					
	2	175	7.43	33.807	26.44	4.07	1.71	29	15.5					
2	194	7.06	33.869	26.54	3.86	2.05	2.05	41	20.6					
2	263	6.11	33.947	26.73	2.83	2.25	2.25	54	25.9					
	1	450	5.14	34.074	26.95	0.97	2.85	93	37.1					
1	666	4.34	34.202	27.14	0.45	3.18	3.18	124	39.1					
	1	953	3.64	34.397	27.37	0.31	3.26	146	39.7					
1														
	1	1473	2.52	34.534	27.58	0.68	2.99	159	35.5					
1	1934	1.94	34.607	27.68	1.45	2.84	2.84	156	32.5					

STATION 287-011 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.58		32.752		25.12	285.1	0.000	6.47	
10	10.56		32.748		25.12	285.3	0.029	6.45	
20	10.60		32.749		25.12	286.1	0.058	6.43	
30	10.50		32.763		25.14	283.6	0.086	6.45	
50	10.21	0.02	32.757	0.001	25.19	279.6	0.142	6.45	0.00
75	9.61	0.01	32.760	0.008	25.29	270.4	0.211	6.38	0.02
100	8.68		33.056		25.67	234.8	0.274	5.59	
150	7.65	0.01	33.711	0.002	26.33	172.2	0.376	4.40	0.00
200	6.96	0.00	33.881	0.003	26.56	150.9	0.457	3.78	0.01
250	6.25	0.01	33.942	0.005	26.71	137.9	0.529	3.03	0.02
300	5.81	0.06	33.978	0.003	26.79	130.3	0.596	2.36	0.00
400	5.27	0.07	34.047	0.004	26.91	119.7	0.721	1.34	0.00
500	4.93	0.00	34.104	0.001	27.00	112.5	0.837	0.76	0.04
600	4.55	0.00	34.163	0.001	27.08	104.7	0.946	0.50	0.05
700	4.24	0.01	34.227	0.002	27.17	97.3	1.047	0.41	0.01
800	3.98	0.01	34.297	0.005	27.25	89.9	1.140	0.33	0.02
1000	3.52	0.00	34.416	0.003	27.39	77.4	1.308	0.32	0.00
1200	3.07	0.01	34.483	0.009	27.49	68.6	1.454	0.40	0.01
1500	2.48	---	34.530	---	27.59	59.3	1.645	0.71	---

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STATION 287-012 OBSERVED VALUES														
DATE	5/12/61	HR	13	LAT	45-02N	LONG	125-58W	SDG	2743	WEA	02			
SECD1	BA	26	CL	6	AMT	8	DRY	10.2	WET	7.8	RELHU	72	VIS	7
WVEL	7	DIR	30	SEA	2	DIR	30	SWL	1	DIR		WA	04	08
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	1	0	11.20	32.165	24.56	6.38			0.10	1.46	11.24			
A	1	9							0.12	1.60				
	10	11.20	32.173	24.56	6.32									
P	1	20	11.03	32.349	24.73	6.38								
	30	10.68	32.528	24.93	6.42				0.00	0.68				
	40	10.14	32.603	25.08	6.38									
P	1	60	9.86	32.628	25.15	6.31			0.11	0.12				
	80	9.60	32.810	25.33	5.69									
	100	8.94	33.148	25.70	4.76									
	121	8.40	33.536	26.09	3.79									
	145	7.85	33.743	26.33	3.72									
	169	7.44	33.835	26.46	3.09									
	194	7.08	33.897	26.56	2.88									
2	293	6.18	34.030	26.79	1.71									
2	492	5.07	34.145	27.01	0.87									
2	742	4.34	34.280	27.20	0.37									
2	1043	3.50	34.445	27.42	0.45									
2	1593	2.30	34.553	27.61	0.90									
2	2068	1.84	34.625	27.71	1.67									

STATION 287-012 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.20		32.165		24.56	338.8	0.000	6.38	
10	11.20		32.173		24.56	338.4	0.034	6.32	
20	11.03		32.349		24.73	322.8	0.067	6.38	
30	10.68		32.528		24.93	303.9	0.099	6.42	
50	9.93	0.04	32.616	0.013	25.13	285.7	0.158	6.38	0.02
75	9.68	0.01	32.740	0.000	25.27	272.3	0.227	5.89	0.01
100	8.94		33.148		25.70	231.9	0.290	4.76	
150	7.76	0.00	33.768	0.002	26.36	169.4	0.391	3.59	0.03
200	7.01	0.01	33.908	0.001	26.58	149.6	0.471	2.81	0.01
250	6.51	0.02	33.986	0.005	26.71	137.8	0.542	2.22	0.04
300	6.13	0.00	34.036	0.001	26.80	129.9	0.609	1.66	0.01
400	5.50	0.02	34.105	0.008	26.93	118.1	0.733	1.11	0.07
500	5.04	0.00	34.149	0.000	27.02	110.4	0.848	0.85	0.00
600	4.71	0.03	34.204	0.001	27.10	103.4	0.955	0.58	0.00
700	4.44	0.02	34.258	0.000	27.17	97.2	1.055	0.41	0.00
800	4.17	0.00	34.315	0.002	27.25	90.8	1.149	0.35	0.02
1000	3.61	0.00	34.424	0.002	27.39	77.9	1.318	0.41	0.01
1200	3.10	0.01	34.480	0.008	27.49	68.4	1.464	0.53	0.00
1500	2.46	0.01	34.544	0.005	27.59	58.8	1.655	0.79	0.00
2000	1.87	---	34.616	---	27.70	48.9	1.924	1.54	---

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STATION 287-013 OBSERVED VALUES

DATE 5/13/61		HR 00	LAT 44-33N	LONG 126-08W	SDG 2834	WEA 02						
SECDI	BA 28	CL 6	AMT 9	DRY 10.1	WET 7.8	RELHU 71						
WVEL	3	DIR 33	SEA 2	DIR 32	SWL 0	DIR 00						
						WA 02, 11, 10, 06						
C	1	10	11.34	32.294	24.63	6.41	0.59	7	0.3	0.25	2.97	25.54
			11.27	32.293	24.64	6.42	0.70	7	1.1	0.36	3.75	27.28
A	1	20	11.21	32.296	24.66	6.42						
		30	10.83	32.412	24.81	6.40						
		33										
A	1	40	10.17	32.588	25.06	6.39	0.75	5	2.0	0.28	1.51	5.32
A	1	60	9.61	32.681	25.23	6.08	1.36	19	12.0	0.17	0.10	0.22
		67										
		80	9.13	32.947	25.51	5.30						
		100	8.48	33.397	25.97	4.31						
		125	7.87	33.673	26.27	3.55						
		150	7.64	33.800	26.41	3.21						
		175	7.21	33.910	26.55	2.88						
		200	6.84	33.945	26.63	2.60						
		298	5.92	34.004	26.80	1.85						
		499	4.84	34.130	27.03	0.48						
		748	4.08	34.323	27.26	0.49						
		1049	3.45	34.448	27.42	0.72						
		1445	2.38	34.581	27.63	1.00						
		2073	1.82	34.628	27.71	1.72						

STATION 287-013 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.34		32.294		24.63	331.7	0.000	6.41	
10	11.27		32.293		24.64	330.8	0.034	6.42	
20	11.21		32.296		24.66	329.7	0.067	6.42	
30	10.83		32.412		24.81	315.0	0.099	6.40	
50	9.82	0.04	32.645	0.022	25.17	281.8	0.159	6.29	0.00
75	9.25	0.01	32.864	0.000	25.43	257.2	0.226	5.53	0.01
100	8.48		33.397		25.97	206.6	0.284	4.31	
150	7.64		33.790		26.41	165.5	0.377	3.21	
200	6.84		33.945		26.63	144.6	0.454	2.60	
250	6.30	0.02	33.983	0.005	26.73	135.4	0.524	2.18	0.02
300	5.91	0.00	34.005	0.000	26.80	129.4	0.590	1.83	0.00
400	5.28	0.03	34.066	0.001	26.92	118.4	0.705	1.06	0.04
500	4.84	0.00	34.131	0.000	27.03	109.4	0.819	0.48	0.00
600	4.48	0.02	34.211	0.005	27.13	100.3	0.924	0.36	0.07
700	4.19	0.01	34.287	0.003	27.22	92.2	1.020	0.41	0.04
800	3.97	0.01	34.340	0.002	27.29	85.8	1.109	0.52	0.01
1000	3.55	0.01	34.432	0.002	27.40	76.4	1.271	0.67	0.01
1200	3.03	0.03	34.506	0.002	27.51	66.4	1.414	0.82	0.01
1500	2.28	---	34.593	---	27.65	53.1	1.593	1.05	---
2000	1.81	---	34.633	---	27.71	46.9	1.843	1.62	---

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STATION 287-014 OBSERVED VALUES

DATE	5/13/61	HR	08	LAT	44-06N	LONG	125-16W	SDG	2250	WEA	02			
SECDI	BA	27	CL	6	AMT	9	DRY	10.0	WET	7.2	RELHU	67	VIS	7
WVEL	4	DIR	31	SEA	1	DIR	30	SWL	1	DIR	WA	00	00	00
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	2	0	11.38	32.151	24.51	6.42	0.53	9	0.1	5.42				
	10	11.33	32.156	24.53	6.43	0.59	7	0.0	0.24	7.87				
	2	19	11.20	32.251	24.62	6.43	0.62	6	0.0					
	29	11.01	32.253	24.66	6.37	0.60	6	0.0						
A	2	33							0.33	2.25				
	39	10.04	32.466	24.99	6.12	0.88	9	3.5						
	2	59	9.48	32.628	25.21	5.96	1.01	13	5.9					
	67													
A	2	79	9.21	32.966	25.52	5.16	1.28	16	11.1	0.24				
	2	98	8.78	33.460	25.97	4.01	1.84	32	21.2					
	2	123	7.81	33.742	26.34	3.27	1.86	36	19.4					
	2	148	7.18	33.904	26.55	2.74	1.63	30	15.8					
2	173	6.90	33.978	26.65	2.22	2.23	48	22.9						
	1	195	6.73	33.995	26.69	1.90	2.42	41	23.0					
	1	294	6.35	34.024	26.76	1.72	2.72	65	32.6					
	1	493	5.03	34.168	27.03	0.69	3.01	99	34.1					
1	1	1042	3.39	34.458	27.44	0.30	3.14	147	37.1					
	1	1591	2.33	34.560	27.61	1.03	2.76	133	35.5					

STATION 287-014 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.38		32.151		24.51	342.9	0.000	6.42	
10	11.33		32.156		24.53	341.9	0.035	6.43	
20	11.20	0.01	32.249	0.005	24.62	333.0	0.068	6.43	0.00
30	10.92	0.02	32.272	0.004	24.69	326.9	0.101	6.35	0.00
50	9.60	0.06	32.566	0.022	25.14	284.2	0.163	6.04	0.05
75	9.26	0.01	32.884	0.000	25.44	255.8	0.230	5.36	0.01
100	8.70	0.01	33.492	0.004	26.01	202.8	0.287	3.93	0.01
150	7.15	0.00	33.913	0.000	26.56	150.4	0.376	2.70	0.00
M									
200	6.73	0.04	34.009	0.016	26.70	138.3	0.448	1.97	0.10
M									
250	6.48	0.06	34.035	0.021	26.75	133.9	0.516	1.71	0.13
300	6.31	0.01	34.028	0.001	26.77	132.9	0.583	1.69	0.01
400	5.67	0.05	34.095	0.006	26.90	121.0	0.710	1.20	0.06
500	5.00	0.00	34.173	0.000	27.04	108.2	0.824	0.67	0.01
600	4.57	0.06	34.238	0.001	27.14	99.3	0.928	0.43	0.06
700	4.21	0.09	34.298	0.001	27.23	91.5	1.023	0.27	0.10
800	3.90	0.10	34.351	0.001	27.30	84.9	1.112	0.18	0.10
1000	3.45	0.03	34.442	0.000	27.42	74.7	1.271	0.25	0.03
1200	3.03	---	34.507	---	27.51	66.4	1.412	0.40	---
1500	2.47	---	34.556	---	27.60	58.0	1.599	0.83	---

STATION 287-015 OBSERVED VALUES

DATE 5/13/61 HR 12 LAT 43-58N LONG 124-47W SDG 110 WEA 02
 SECD1 BA 26 CL 6 AMT 9 DRY 10.6 WET 7.5 RELHU 70 VIS 7
 WVEL 1 DIR 28 SEA 1 DIR 28 SWL 1 DIR 31 WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.54	31.966	24.34	6.34				0.19	2.97	25.54
	3	11.54	31.949	24.33	6.28						
	6	11.54	31.950	24.33	6.39						
A	7								0.22	3.28	
	10	11.36	32.112	24.49	6.48						
	15	11.19	32.156	24.55	6.48						
	20	11.09	32.175	24.58	6.50						
A	23								0.40	4.70	
	25	11.07	32.204	24.61	6.48						
	30	11.04	32.214	24.62	6.48						
	40	10.58	32.315	24.78	6.42						
A	46								0.20	2.65	
	60	8.70	33.350	25.90	4.07						
	80	8.23	33.593	26.16	3.29						
	100	7.74	33.736	26.34	2.70						

STATION 287-015 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.54		31.966		24.34	359.3	0.000	6.34	
10	11.36		32.112		24.49	345.7	0.036	6.48	
20	11.09		32.175		24.58	336.6	0.070	6.50	
30	11.04		32.214		24.62	333.1	0.103	6.48	
50	9.63	0.11	32.813	0.079	25.33	266.4	0.163	5.33	0.19
75	8.28	0.04	33.574	0.022	26.13	190.1	0.220	3.40	0.04
100	7.74		33.736		26.34	170.8	0.265	2.70	

STATION 287-016 OBSERVED VALUES

DATE 5/13/61		HR 15		LAT 44-04N		LONG 124-27W		SDG 122		WEA 01	
SECDI		BA 26		CL 6		AMT 8		DRY 11.0		WET 8.2	
WVEL		DIR 00		SEA 1		DIR		SWL 1		DIR 31	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	0	11.46	31.897	24.30	6.34				0.09	5.49	
	3	11.46	31.923	24.32	6.28						
	6	11.49	31.927	24.32	6.40						
A	7										
	10	11.33	32.054	24.45	6.48				0.12	4.52	
	15	11.29	32.126	24.51	6.48						
A	20	11.15	32.146	24.55	6.50						
	23										
	25	11.04	32.180	24.60	6.48				0.20	6.17	
A	30	10.36	32.322	24.82	6.48						
	40	9.37	32.666	25.26	6.42						
	46										
A	60	8.26	33.526	26.10	4.06				0.12	0.50	
	80	7.61	33.824	26.43	3.27						
	100	7.23	33.923	26.56	2.70						

STATION 287-016 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	11.46		31.897		24.30	363.1	0.000	6.34	
10	11.33		32.054		24.45	349.4	0.036	6.48	
20	11.15		32.146		24.55	339.8	0.071	6.50	
30	10.36		32.322		24.82	313.9	0.103	6.48	
50	8.71	0.03	33.117	0.033	25.71	229.9	0.158	5.33	0.19
75	7.74	0.01	33.785	0.011	26.38	166.7	0.207	3.38	0.04
100	7.23		33.923		26.56	149.9	0.247	2.70	

STATION 287-017 OBSERVED VALUES

DATE 5/13/61 HR 18 LAT 44-00N LONG 124-12W SDG 53 WEA 03
 SECD 1 BA 23 CL 0 AMT 9 DRY 12.2 WET 9.4 RELHU 70 VIS 7
 WVEL 1 DIR 18 SEA 1 DIR 18 SWL 1 DIR 30 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.66	31.228	23.75	6.66				0.33	6.58	
A	3	11.26	31.818	24.28	6.46				0.74	12.07	
	5										
	6	11.24	31.897	24.34	6.37						
	10	11.24	32.019	24.44	6.48						
	15	11.07	32.052	24.49	6.36						
A	16								0.63	5.27	
	20	11.04	32.057	24.50	6.28						
	25	11.01	32.062	24.51	6.28						
	30	10.99	32.085	24.53	6.25						
A	32								0.56	2.65	

STATION 287-017 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.66		31.228		23.75	415.9	0.000	6.66	
10	11.24		32.019		24.44	350.5	0.039	6.48	
20	11.04		32.057		24.50	344.5	0.074	6.28	
30	10.99		32.085		24.53	341.8	0.108	6.25	

STATION 287-018 OBSERVED VALUES

DATE 5/13/61 HR 21 LAT 44-20N LONG 124-11W SDG 51 WEA 02
 SECD1 BA 27 CL 8 AMT 9 DRY 12.1 WET 9.8 RELHU 76 VIS 6
 WVEL 2 DIR 22 SEA 1 DIR 22 SWL 1 DIR 30 WA 03

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	11.86	30.932	23.48	6.63	0.30	3	0.0			
1	3	11.91	30.941	23.48	6.64	0.26	1	0.0			
1	6	11.67	31.198	23.72	6.56	0.29	2	0.0			
1	10	11.42	31.666	24.13	6.52	0.30	5	0.0			
1	15	11.30	31.741	24.21	6.44	0.38	6	0.0			
1	20	11.26	31.758	24.23	6.43	0.35	3	0.0			
1	25	11.22	31.787	24.26	6.40	0.32	8	0.0			
1	30	11.20	31.794	24.27	6.40	0.33	3	0.0			

STATION 287-018 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.86		30.932		23.48	441.2	0.000	6.63	
10	11.42		31.666		24.13	379.6	0.042	6.52	
20	11.26		31.758		24.23	370.3	0.079	6.43	
30	11.20		31.794		24.27	366.8	0.116	6.40	

STATION 287-018X OBSERVED VALUES

DATE 5/13/61 HR 19 LAT 44-12N LONG 124-11W SDG 51 WEA 02
 SECDI 11 BA 27 CL 8 AMT 9 DRY 12.1 WET 9.8 RELHU 76 VIS 66
 WVEL 2 DIR 22 SEA 1 DIR 30 SWL 1 DIR 30 WA

	DEPTH	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	0	0.52	6	0.5	0.37	8.25	59.24
A	4	0.52	7	0.0	0.62	9.91	70.14
A	15	0.51	3	0.0	0.43	6.56	12.48
A	30				0.72	3.55	0.30

STATION 287-019 OBSERVED VALUES

DATE 5/14/61 HR 00 LAT 44-28N LONG 124-27W SDG 77 WEA 06
 SECID1 BA 25 CL 6 AMT 8 DRY 10.5 WET 9.4 RELHU 86 VIS 7
 WVEL 10 DIR 25 SEA 2 DIR 21 SWL 1 DIR 31 WA 09

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	11.54	31.876	24.27	6.51			0.05	2.87	
	3	11.56	31.893	24.28	6.53						
	6	11.57	31.873	24.26	6.50						
A	7								0.11	2.53	
	10	11.57	31.884	24.27	6.51						
	15	11.54	31.892	24.28	6.51						
	20	11.26	31.938	24.37	6.53				0.13	3.36	
A	22										
	25	11.08	31.977	24.43	6.53						
	30	10.95	32.033	24.50	6.43						
	39	9.18	32.881	25.45	4.93						
A	45								0.25	0.69	
	59	8.44	33.379	25.96	3.61						

STATION 287-019 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.54		31.876		24.27	366.0	0.000	6.51	
10	11.57		31.884		24.27	366.1	0.037	6.51	
20	11.26		31.938		24.37	357.0	0.073	6.53	
30	10.95		32.033		24.50	345.0	0.108	6.43	
50	8.23	---	33.392	---	26.00	202.5	0.163	3.86	---

STATION 287-020 OBSERVED VALUES

DATE 5/14/61 HR 04 LAT 44-34N LONG 124-50W SDG 403 WEA 51
 SECDI BA 24 CL 6 AMT 8 DRY 11.1 WET 11.1 RELHU 99 VIS 6
 WVEL 4 DIR 25 SEA 1 DIR 25 SWL 1 DIR 31 WA 16.07

	CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	11.47	32.261	24.58	6.44				0.20	2.96	
	2	3	11.44	32.252	24.58	6.46						
P	2	6	11.48	32.246	24.57	6.44				0.27	3.27	
	2	10	11.47	32.246	24.57	6.45						
	2	15	11.45	32.249	24.58	6.46						
P	2	20	11.45	32.254	24.58	6.47				0.24	3.11	
	2	25	11.43	32.263	24.59	6.47						
	2	30	11.34	32.259	24.61	6.47						
A		39								0.36	6.61	
	2	40	9.98	32.484	25.01	6.37						
	2	60	9.36	32.741	25.32	5.80						
	2	79	8.83	33.256	25.80	4.46						
	2	99	8.50	33.469	26.02	3.72						
	1	123	8.04	33.674	26.25	3.11						
	1	147	7.50	33.826	26.45	2.69						
	1	170	7.04	33.929	26.59	2.26						
	1	194	6.79	33.969	26.66	1.91						
	1	291	6.11	34.029	26.79	1.58						

STATION 287-020 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.47		32.261		24.58	336.4	0.000	6.44	
10	11.47		32.246		24.57	337.7	0.034	6.45	
20	11.45		32.254		24.58	336.9	0.068	6.47	
30	11.34		32.259		24.61	334.9	0.102	6.47	
50	9.49	0.11	32.610	0.023	25.19	279.2	0.163	6.17	0.02
75	8.93	0.00	33.149	0.016	25.70	231.2	0.227	4.75	0.04
100	8.48	0.00	33.479	0.000	26.03	200.5	0.281	3.69	0.00
150	7.43	0.00	33.842	0.000	26.47	159.4	0.371	2.63	0.00
200	6.73	---	33.977	---	26.67	140.7	0.446	1.84	---
250	6.33	---	34.024	---	26.76	132.8	0.514	1.51	---

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STATION 287-021	OBSERVED VALUES
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DATE 5/14/61 HR 12 LAT 44-46N LONG 125-25W SDG 2307 WEA 50
SECDI BA 25 CL 0 AMT 9 DRY 11.1 WET 10.4 RELHU 94 VIS 6
WVVEL 3 DIR 25 SEA 1 DIR 24 SWL 1 DIR 18 WA 00.00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	3	0	32.224	24.56	6.45				0.40	2.98	
	3	10	32.219	24.55	6.50				0.38	2.39	
	3	11.46									
P	3	20	32.224	24.57	6.50				0.38	2.74	
	3	30	32.375	24.59	6.55						
	3	11.89									
P	3	39	32.585	25.03	6.42				0.59	5.34	
	3	59	32.665	25.17	6.12						
	3	78	32.798	25.31	5.77						
3	3	98	33.223	25.70	4.63						
	3	120	33.571	26.07	3.68						
	3	145	33.704	26.25	3.29						
3	3	176	33.849	26.43	2.91						
	3										
	3										
3	3	196	33.916	26.55	2.60						
	3	296	34.016	26.78	1.72						
	3	495	34.150	27.00	0.67						
2	2	743	34.279	27.19	0.43						
	2										
	2										
2	2	1043	34.444	27.42	0.46						
	2	1591	34.554	27.60	0.96						
	2	2065	34.629	27.71	1.74						

STATION 287-021 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	11.45		32.224		24.56	338.7	0.000	6.45	
10	11.46		32.219		24.55	339.5	0.034	6.50	
20	11.40		32.224		24.57	338.3	0.068	6.50	
30	11.89		32.375		24.59	335.9	0.102	6.55	
50	9.84	0.17	32.658	0.025	25.17	281.1	0.164	6.26	0.00
75	9.71	0.01	32.766	0.005	25.28	271.5	0.233	5.85	0.01
100	9.23	0.01	33.262	0.001	25.74	227.9	0.295	4.53	0.00
150	8.10	0.01	33.720	0.001	26.28	177.2	0.396	3.23	0.01
200	7.16	0.01	33.924	0.002	26.57	150.4	0.478	2.55	0.01
250	6.48	0.07	33.996	0.015	26.72	136.7	0.550	2.04	0.04
300	6.10	0.00	34.019	0.000	26.79	130.8	0.617	1.69	0.00
400	5.51	0.06	34.093	0.002	26.92	119.2	0.742	1.07	0.01
500	5.16	0.00	34.153	0.000	27.01	111.6	0.858	0.66	0.00
600	4.81	0.02	34.207	0.002	27.09	104.5	0.966	0.48	0.04
700	4.50	0.01	34.258	0.001	27.16	98.0	1.067	0.42	0.02
800	4.19	0.01	34.313	0.002	27.24	91.1	1.161	0.42	0.00
1000	3.56	0.01	34.422	0.002	27.39	77.3	1.330	0.44	0.00
1200	3.07	0.02	34.489	0.008	27.49	68.2	1.475	0.55	0.00
1500	2.53	0.01	34.545	0.005	27.59	59.6	1.667	0.84	0.00
2000	1.88	---	34.610	---	27.70	48.7	1.938	1.61	---

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STATION 287-022 OBSERVED VALUES

DATE 5/14/61 HR 17 LAT 45-05N LONG 125-10W SDG 1640 WEA 01
 SECD1 BA 25 CL 6 AMT 6 DRY 11.1 WET 9.3 RELHU 89 VIS 7
 WVEL 2 DIR 27 SEA 1 DIR 31 SWL 1 DIR 27 WA 20.05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	11.38	32.300	24.63	6.64			0.30	4.64	
A	2	10	11.28	32.302	24.65	6.65			0.31	3.40	
	2	20	11.25	32.315	24.66	6.64					
A	2	23	11.08	32.357	24.73	6.54			0.51	2.29	
	2	30	10.36	32.536	24.99	6.51					
		40									
A	2	46	9.94	32.632	25.14	6.29			0.21	0.77	
	2	60	9.71	32.689	25.22	6.01					
	2	100	9.56	33.140	25.59	4.88					
	2	122	8.80	33.545	26.03	3.81					
	2	146	8.08			3.30					
	2	171	7.71			3.00					
	2	195	7.28			2.88					
	1	284	6.47			2.22					
	1	476	5.17			0.81					
	1	715	4.36			0.92					
	1	1009	3.53			0.41					

STATION 287-022 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEO.POT. ANOMALY	OXY.	E(O)
0	11.38		32.290		24.63	331.9	0.000	6.64	
10	11.28		32.302		24.65	330.3	0.034	6.65	
20	11.25		32.315		24.66	329.0	0.067	6.64	
30	11.08		32.357		24.73	323.2	0.099	6.54	
50	10.05	0.05	32.608	0.013	25.10	288.2	0.160	6.42	0.01
75	9.75	0.00	32.658	0.014	25.19	280.2	0.231	6.12	0.02
100	9.56		33.140		25.59	242.0	0.297	4.88	
150	8.01	0.01						3.24	0.00
200	7.22	0.01						2.84	0.00
250	6.73	0.03						2.47	0.00
300	6.33	0.01						2.08	0.02
400	5.60	0.02						1.31	0.12
500	5.06	0.01						0.78	0.04
600	4.68	0.03						0.76	0.10
700	4.39	0.01						0.89	0.02
800	4.12	--						0.86	--
1000	3.63	--						0.54	--

STATION	287-022D	OBSERVED VALUES
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DATE 5/14/61 HR 13 LAT 44-47N LONG 125-24W SDG 51 WEA 02
SECDI BA CL AMT DRY DIR WET RELHU VIS
WVEL 3 DIR 24 SEA DIR SWL WA

DEPTH	CHL-A	PROD-I	PROD-S
0	0.13	0.74	5.66

STATION 287-023 OBSERVED VALUES

DATE 5/14/61		HR 21	LAT 44-58N		LONG 124-49W		SDG 549	WEA 02			
SECD1	BA 30	CL 6	AMT 2	DRY 10.6	WET 10.3	RELHU 94	VIS 8				
WVEL	2	DIR 28	SEA 1	DIR 27	SWL 1	DIR 27	WA 00, 15, --				
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	1	12.02	32.306	24.52	6.51	0.65	8	0.0	0.17	1.90	13.14
	1	11.95	32.304	24.53	6.53						
	1	11.50	32.300	24.61	6.51						
A	9					0.63	7	0.0	0.20	3.14	17.66
	10	11.43	32.314	24.63	6.54						
	15	11.38	32.311	24.64	6.50						
	1	11.26	32.336	24.68	6.54						
C	1	11.01	32.414	24.78	6.52						
	1	10.94	32.423	24.80	6.51	0.73	7	0.0	0.28	4.28	6.46
	1	10.66	32.438	24.86	6.44						
A	1	9.45	32.578	25.17	6.09	0.95	8	4.3	0.26	1.53	1.10
	1	9.16	32.939	25.50	5.20						
	1	8.71	33.305	25.86	4.29						
	1	8.42	33.500	26.06	3.93						
1	146	7.74	33.822	26.41	2.91						
	1	7.33	33.843	26.48	2.91						
	2	6.96	33.906	26.58	2.69						
2	296	6.22	34.002	26.76	2.03						
	3	481	5.14	34.141	0.96						

STATION 287-024 OBSERVED VALUES

DATE 5/15/61 HR 02 LAT 44-49N LONG 124-22W SDG 137 WEA 02
 SECD 1 BA 24 CL 8 AMT 2 DRY 11.8 WET 10.2 RELHU 82 VIS 8
 WVEL 5 DIR 33 SEA 1 DIR 33 SWL 1 DIR 27 WA 06

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.78	31.838	24.20	6.45				0.21	1.60	
	3	11.78	31.842	24.21	6.47						
	6	11.35	31.970	24.38	6.54						
A	8								0.25	2.51	
	10	11.25	32.077	24.48	6.57						
	15	11.43	32.246	24.58	6.45						
	20	11.33	32.297	24.64	6.47						
P	1	11.27	32.300	24.65	6.48				0.43	2.98	
	30	11.24	32.309	24.66	6.52						
	40	10.79	32.338	24.76	6.52						
A	50								0.31	0.58	
	60	9.23	32.627	25.25	6.09						
	80	8.55	33.454	26.00	3.91						
	99	7.93	33.734	26.31	2.99						
	124	7.27	33.888	26.53	2.19						

STATION 287-024 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.78		31.838		24.20	372.9	0.000	6.45	
10	11.25		32.077		24.48	346.4	0.036	6.57	
20	11.33		32.297		24.64	331.7	0.070	6.47	
30	11.24		32.309		24.66	329.5	0.103	6.52	
50	10.01	0.07	32.420	0.010	24.97	300.7	0.166	6.45	0.05
75	8.68	0.03	33.248	0.034	25.82	220.1	0.232	4.48	0.09
100	7.90	---	33.745	---	26.32	172.4	0.281	2.95	---

STATION 287-025 OBSERVED VALUES

DATE 5/15/61 HR 04 LAT 44-47N LONG 124-07W SDG 55 WEA 05
 SECDI BA 24 CL 6 AMT 6 DRY 11.4 WET 10.0 RELHU 83 VIS 8
 WVEL 10 DIR 36 SEA 1 DIR 36 SWL 1 DIR 33 WA 04, --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	9	12.45	31.159	23.55	6.44	0.57	5	0.0	0.12	2.78	
	3	12.41	31.166	23.56	6.47	0.56	6	0.0			
P 2	6	12.24	31.311	23.71	6.50	0.54	3	0.0	0.12	2.68	
2	10	11.62	31.566	24.02	6.47	0.48	3	0.0			
2	15	11.56	31.595	24.05	6.51	0.47	4	0.0			
A	19								0.16	2.66	
2	20	11.58	31.617	24.06	6.50	0.51	4	0.0			
2	25	11.57	31.665	24.10	6.51	0.51	3	0.0			
2	30	11.54	31.697	24.13	6.50	0.55	3	0.0			
A	38								0.20	1.80	
2	40	10.52	32.042	24.58	5.78	0.85	11	3.1			

STATION 287-025 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.45		31.159		23.55	434.9	0.000	6.44	
10	11.62		31.566		24.02	390.4	0.042	6.47	
20	11.58		31.617		24.06	386.2	0.081	6.50	
30	11.54		31.697		24.13	379.8	0.119	6.50	

STATION 287-026 OBSERVED VALUES

DATE 5/15/61 HR 08 LAT 45-02N LONG 124-13W SDG 122 WEA 01
 SECDI BA 25 CL 1 AMT 8 DRY 14.3 WET 10.1 RELHU 56 VIS 8
 WVEL 7 DIR 33 SEA 1 DIR 14 SWL 1 DIR 30 WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	12.04	31.208	23.66	6.43						
1	3	12.06	31.213	23.66	6.43						
1	6	11.98			6.47						
1	10	11.57	31.727	24.15	6.51						
1	15	10.94	31.933	24.42	6.38						
1	20	11.00	32.002	24.47	6.44						
1	25	11.27	32.153	24.54	6.47						
1	30	11.27	32.217	24.59	6.47						
1	40	11.10	32.273	24.66	6.53						
1	59	8.62	33.168	25.77	3.92						
1	79	7.81	33.636	26.25	3.00						
1	99	7.46	33.844	26.47	2.51						

STATION 287-026 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.04		31.208		23.66	424.0	0.000	6.43	
10	11.57		31.727		24.15	377.7	0.041	6.51	
20	11.00		32.002		24.47	347.9	0.077	6.44	
30	11.27		32.217		24.59	336.8	0.111	6.47	
50	9.87	0.19	32.707	0.061	25.21	277.9	0.173	5.27	0.22
75	7.88	0.04	33.572	0.006	26.19	184.5	0.230	3.09	0.04

STATION 287-027 OBSERVED VALUES												
DATE	5/15/61	HR	13	LAT	45-13N	LONG	124-29W	SDG	433	WEA	03	
SECDI	BA	25	CL	6	AMT	5	DRY	11.2	WET	9.2	RELHU	80 VIS 7
WVEL	7	DIR	02	SEA	2	DIR	02	SWL	1	DIR	30	WA 15, 05
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S	
P	2	11.26	32.362	24.70	6.47				0.36	7.49	54.04	
	3	11.27	32.354	24.69	6.46							
	6	11.27	32.356	24.69	6.47							
	10	11.21	32.364	24.71	6.47							
	15	10.97	32.378	24.76	6.50							
	20	10.91	32.387	24.78	6.51							
	25	10.68	32.425	24.85	6.47							
	30	10.54	32.441	24.89	6.47							
	40	9.64	32.557	25.13	6.27							
	60	9.20	32.629	25.25	6.04							
	80	8.97	33.098	25.66	4.93							
	100	8.20	33.490	26.08	4.00							
	124	7.99	33.669	26.25	3.54							
	150	7.58	33.907	26.50	2.88							
	175	7.19	33.903	26.55	2.82							
	201	6.84	33.942	26.63	2.63							
	298	5.98	34.028	26.81	1.62							

STATION 287-027 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.26		32.362		24.70	325.3	0.000	6.47	
10	11.21		32.364		24.71	324.5	0.033	6.47	
20	10.91		32.387		24.78	318.0	0.065	6.51	
30	10.54		32.441		24.89	308.0	0.096	6.47	
50	9.29	0.07	32.582	0.025	25.20	278.3	0.155	6.20	0.05
75	9.04	0.02	32.966	0.015	25.54	246.5	0.221	5.24	0.03
100	8.20		33.480		26.08	195.6	0.276	4.00	
150	7.58		33.907		26.50	156.7	0.364	2.88	
200	6.85	0.00	33.940	0.000	26.63	145.1	0.439	2.64	0.00
250	6.32	---	33.997	---	26.74	134.6	0.509	2.18	---

STATION 287-028 OBSERVED VALUES														
DATE	5/15/61	HR	17	LAT	45-18N	LONG	124-04W	SDG	80	WEA	01			
SECD1	BA	23	CL	6	AMT	1	DRY	11.6	WET	10.1	RELHU	82	VIS	7
WVEL	4	DIR	03	SEA	2	DIR	03	SWL	1	DIR	33	WA	08	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	1	0	12.07	31.344	23.76	6.38			0.12	3.60				
	1	3	12.04	31.346	23.77	6.40								
	1	6	12.03	31.362	23.79	6.41								
A	1	9							0.35	3.35				
	10	11.49	31.968	24.35	6.43									
	15	11.36	32.111	24.49	6.43									
	1	20	11.33	32.116	24.50	6.42								
	1	25	11.09	32.180	24.59	6.43								
P	1	30	10.99	32.248	24.66	6.43			0.05	1.79				
	1	40	9.89	32.321	24.90	6.04								
	1	59	8.70	33.166	25.75	4.36								
A	1	61							0.17	0.31				
	1	79	7.74	33.735	26.34	2.58								

STATION 287-028 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	12.07		31.344		23.76	414.5	0.000	6.38					
10	11.49		31.968		24.35	358.5	0.039	6.43					
20	11.33		32.116		24.50	345.1	0.074	6.42					
30	10.99		32.248		24.66	329.8	0.108	6.43					
50	9.17	0.04	32.727	0.051	25.33	265.7	0.168	5.23	0.05				
75	7.91	---	33.647	---	26.25	179.3	0.223	2.94	---				

STATION 287-029 OBSERVED VALUES

DATE 5/15/61 HR 19 LAT 45-34N LONG 124-02W SDG 65 WEA 02
 SECDI BA 22 CL 1 AMT 5 DRY 12.2 WET 11.1 RELHU 88 VIS 8
 WVEL 8 DIR 35 SEA 2 DIR 33 SWL 0 DIR WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	1	0	12.20	30.903	23.40	6.38	0.61	7	0.2	5.27	22.84
	1	0	12.21	30.834	23.34	6.37	0.52	12	0.2	5.27	22.84
	1	3	12.21	30.834	23.34	6.37	0.53	7	0.2	5.27	22.84
A	1	6	12.06	31.092	23.57	6.39	0.58	4	0.1	2.77	18.38
	1	6	12.06	31.092	23.57	6.39	0.51	10	0.1	2.77	18.38
	1	10	11.30	31.966	24.39	6.53	0.59	6	0.1	2.77	18.38
A	1	15	10.95	31.995	24.47	6.54	0.68	7	0.3	2.56	10.24
	1	19	10.88	32.015	24.50	6.55	0.54	7	0.3	2.56	10.24
	1	20	10.78	32.085	24.57	6.82	0.65	4	0.3	2.56	10.24
A	1	30	10.77	32.156	24.63	6.56	0.48	12	0.27	1.17	1.26
	1	38	9.56	32.548	25.13	5.69	0.97	11	4.7	1.17	1.26
	1	39	8.49	32.352	25.15	3.72	1.13	22	6.2	1.17	1.26
		59					2.02	36	20.7		

STATION 287-029 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.20		30.903		23.40	449.3	0.000	6.38	
10	11.30		31.966		24.39	355.4	0.041	6.53	
20	10.88		32.015		24.50	344.9	0.076	6.55	
30	10.77		32.156		24.63	332.9	0.110	6.56	
50	8.70	----	32.622	----	25.33	266.4	0.170	4.61	----

STATION 287-030 OBSERVED VALUES

DATE 5/16/61 HR 00 LAT 45-34N LONG 124-15W SDG 65 WEA 03
 SECD1 BA 16 CL 6 AMT 4 DRY 11.7 WET 10.8 RELHU 88 VIS 7
 WVEL 10 DIR 32 SEA 2 DIR 32 SWL 1 DIR 28 WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.61	31.792	24.19	6.60				0.25	1.55	
	3	11.60	31.792	24.20	6.60						
P	6	11.59	31.794	24.20	6.61				0.20	1.67	
	10	11.50	31.789	24.21	6.56						
	15	10.88	31.929	24.43	6.79						
P	20	10.72	32.025	24.53	6.78				0.49	4.51	
	25	10.45	32.174	24.69	6.74						
	30	10.60	32.403	24.85	6.48						
	40	9.46	32.553	25.15	6.24						
A	41								0.26	1.83	
	60	8.99	32.905	25.50	5.06						
	79	8.53	33.387	25.95	3.80						
	99	8.08	33.629	26.21	3.24						

STATION 287-030 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.61		31.792		24.19	373.4	0.000	6.60	
10	11.50		31.789		24.21	371.9	0.038	6.58	
20	10.72		32.025		24.53	341.6	0.073	6.78	
30	10.60		32.403		24.85	311.8	0.106	6.48	
50	9.08	0.10	32.715	0.004	25.34	265.1	0.164	5.72	0.03
75	8.63	0.00	33.280	0.011	25.86	216.2	0.224	4.04	0.02

STATION 287-031 OBSERVED VALUES

DATE 5/16/61 HR 05 LAT 45-27N LONG 124-52W SDG 860 WEA 03
SECD1 BA 18 CL 6 AMT 8 DRY 10.6 WET 9.6 RELHU 88 VIS 7
WVEL 9 DIR 34 SEA 2 DIR 34 SWL 1 DIR 27 WA 25

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	1	0	11.30	32.415	24.73	6.48				0.22	3.36	
	1	9	11.31	32.411	24.73	6.59				0.23	2.83	
A	1	16	10.96	32.444	24.82	6.55						
	1	23	10.78	32.492	24.88	6.53				0.29	2.36	
A	1	34	10.55	32.517	24.94	6.47						
	1	46	9.74	32.634	25.17	6.36				0.07	1.66	
A	1	52	9.42	32.683	25.26	6.04						
	1	88	9.25	33.057	25.58	5.04						
A	1	109	8.46	33.448	26.01	4.12						
	1	132	8.12	33.663	26.23	3.29						
A	1	155	7.78	33.792	26.38	3.01						
	1	178	7.25	33.918	26.55	2.58						
A	1	268	6.31	33.981	26.73	2.16						
	1	453	5.23	34.122	26.97	1.03						
A	1	692	4.20	34.316	27.24	0.36						

STATION 287-031 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.30		32.415		24.73	322.1	0.000	6.48	
10	11.26	0.01	32.415	0.001	24.74	321.7	0.033	6.59	0.00
20	10.86	0.01	32.466	0.001	24.85	311.3	0.064	6.54	0.00
30	10.66	0.00	32.506	0.002	24.92	305.3	0.095	6.50	0.00
50	9.83	0.01	32.620	0.002	25.15	283.8	0.154	6.38	0.01
75	9.36	0.05	32.810	0.013	25.38	262.1	0.222	5.64	0.02
100	8.81	0.04	33.289	0.010	25.83	219.4	0.283	4.51	0.01
150	7.86	0.01	33.768	0.002	26.35	171.0	0.380	3.05	0.02
200	6.92	0.05	33.965	0.021	26.64	144.2	0.459	2.39	0.06
250	6.41	0.04	33.996	0.018	26.73	135.9	0.529	2.17	0.06
300	5.07	0.02	34.005	0.000	26.78	131.6	0.596	1.96	0.02
400	5.47	0.03	34.080	0.000	26.91	119.6	0.721	1.34	0.03
500	4.99	---	34.159	---	27.03	109.2	0.836	0.83	---
600	4.55	---	34.230	---	27.15	98.9	0.940	0.51	---

STATION 287-032 OBSERVED VALUES													
DATE	5/16/61	HR	11	LAT	45-27N	LONG	125-34W	SDG	2486	WEA	04		
SEC	DI	20	BA	18	CL	0	AMT	9	DRY	10.0	WET	9.9	RELHU
WVEL	8	DIR	35	SEA	2	DIR	35	SWL	1	DIR	27	WA	12.07
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	11.57	32.285	24.58	6.43	0.61	5	0.0	0.90	9.22		
A	2	10	11.57	32.255	24.56	6.45	0.64	6	0.0	0.97			
	2	20	11.20	32.337	24.69	6.57	0.68	6	0.0				
A	2	27	10.94	32.471	24.84	6.60	0.73	5	0.1	0.68			
	2	30	10.57	32.519	24.94	6.50	0.78	7	0.6				
		40											
A	54								0.15	0.23			
	60	9.88	32.639	25.15	6.24	0.81	7	2.0					
	79	9.55	32.835	25.36	5.59	1.00	11	5.5					
	99	9.26	33.202	25.69	4.66	1.39	17	10.1					
	124	8.66	33.556	26.06	3.67	1.53	22	11.0					
	149	8.13	33.724	26.27	3.27	1.84	29	15.1					
	173	7.62	33.836	26.44	3.04	1.99	35	17.7					
	198	7.29	33.912	26.54	2.95	2.01	33	17.0					
1	300	6.28	34.005	26.75	1.88	2.20	49	21.2					
1	500	5.05	34.135	27.01	0.80	2.63	74	25.6					
1	743	4.38	34.280	27.20	0.36	3.13	111	32.6					
1	1043	3.42	34.435	27.42	0.38	2.72	103	29.1					
1	1592	2.35	34.560	27.61	0.95	2.95	158	31.4					
1	2066	1.83	34.628	27.71	1.87	3.10	197	36.7					

STATION 287-032 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.57		32.285		24.58	336.3	0.000	6.43	
10	11.57		32.255		24.56	338.7	0.034	6.45	
20	11.20		32.337		24.69	326.5	0.068	6.57	
30	10.94		32.471		24.84	312.5	0.099	6.60	
50	10.20	0.01	32.571	0.002	25.05	293.2	0.160	6.40	0.01
75	9.60	0.01	32.784	0.002	25.31	268.5	0.230	5.75	0.00
100	9.24	0.00	33.219	0.000	25.71	231.1	0.293	4.61	0.00
150	8.11	0.00	33.720	0.000	26.28	177.3	0.395	3.26	0.00
200	7.27	0.00	33.916	0.001	26.55	152.5	0.477	2.93	0.00
250	6.73	0.01	33.982	0.014	26.68	141.0	0.551	2.45	0.06
300	6.28		34.005		26.75	134.2	0.619	1.88	
400	5.56	0.02	34.075	0.002	26.90	121.2	0.747	1.22	0.03
500	5.05		34.135		27.01	111.6	0.864	0.80	
600	4.73	0.04	34.197	0.000	27.09	104.2	0.971	0.54	0.02
700	4.47	0.02	34.255	0.000	27.17	97.8	1.072	0.39	0.01
800	4.19	0.01	34.313	0.001	27.24	91.2	1.167	0.33	0.01
1000	3.55	0.01	34.415	0.001	27.39	77.8	1.336	0.35	0.01
1200	3.04	0.01	34.484	0.005	27.49	68.2	1.482	0.48	0.01
1500	2.48	0.01	34.548	0.004	27.59	58.8	1.672	0.81	0.00
2000	1.88	---	34.621	---	27.70	48.6	1.941	1.72	---

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STATION 287-033 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.44		32.389		24.69	326.4	0.000	6.46	
10	11.44		32.392		24.69	326.4	0.033	6.50	
20	11.18		32.412		24.75	320.7	0.065	6.72	
30	10.99		32.438		24.81	315.7	0.097	6.76	
50	10.02	0.05	32.673	0.018	25.16	282.8	0.157	6.09	0.05
75	9.86	0.00	32.774	0.003	25.26	273.4	0.227	5.81	0.01
100	9.81		33.104		25.53	248.6	0.292	4.96	
150	8.32		33.675		26.21	184.5	0.400	3.38	
200	7.60	0.02	33.878	0.005	26.47	159.9	0.486	2.75	0.02
250	6.84	0.01	33.973	0.006	26.65	143.3	0.562	2.35	0.01
300	6.28	0.03	34.027	0.017	26.77	132.6	0.631	1.92	0.02
400	5.46	0.00	34.074	0.001	26.91	120.0	0.757	1.15	0.00
500	4.92	0.04	34.142	0.000	27.03	109.6	0.872	0.70	0.02
600	4.56	0.01	34.209	0.000	27.12	101.2	0.978	0.43	0.00
700	4.23	---	34.277	---	27.21	93.4	1.075	0.29	---
800	3.97	---	34.343	---	27.29	86.3	1.165	0.27	---

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STATION 287-033A OBSERVED VALUES

DATE	5/16/61	HR	19	LAT	45-44N	LONG	125-02W	SDG	WEA
SECDI	15	BA	16	CL		DIR	SEA <th>WET</th> <td>VIS</td>	WET	VIS
WVEL	6	DIR	36	SEA		SWL	DIR <th>WA</th> <td></td>	WA	
DEPTH		<td></td> <th><td></td><th><td></td><th><td></td></th></th></th>		<td></td> <th><td></td><th><td></td></th></th>		<td></td> <th><td></td></th>		<td></td>	

STATION 287-034 OBSERVED VALUES

DATE 5/16/61 HR 21 LAT 45-45N LONG 124-33W SDG 1957 WEA 01
 SECD1 BA 16 CL 6 AMT 8 DRY 11.2 WET 10.6 RELHU 94 VIS 7
 WVEL 24 DIR 36 SEA 2 DIR 35 SWL 1 DIR 22 WA 07

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.00	29.716	22.52	6.50				0.23	3.29	
A	3	12.00	29.708	22.51	6.47				0.26	2.39	
	5										
	6	12.00	29.707	22.51	6.48						
	10	11.19	30.635	23.37	6.65						
	15	10.45	31.538	24.20	6.73						
A	16								1.64	8.28	
	20	10.31	32.169	24.71	6.64						
	25	10.06	32.249	24.82	6.38						
	30	9.79	32.359	24.95	6.10						
A	32								0.22	1.84	
	40	9.51	32.460	25.07	6.00						
	60	9.22	32.683	25.29	5.48						
	80	8.59	33.349	25.91	3.75						
	100	8.03	33.711	26.28	3.39						
	125	7.23	33.882	26.53	2.58						

STATION 287-034 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.00		29.716		22.52	533.5	0.000	6.50	
10	11.19		30.635		23.37	452.0	0.050	6.65	
20	10.31		32.169		24.71	324.2	0.089	6.64	
30	9.79		32.359		24.95	302.1	0.120	6.10	
50	9.36	0.03	32.542	0.017	25.16	282.3	0.178	5.84	0.03
75	8.76	0.01	33.176	0.023	25.75	226.7	0.242	4.17	0.08
100	8.03		33.711		26.28	176.8	0.292	3.39	

STATION 287-035 OBSERVED VALUES

DATE 5/17/61 HR 01 LAT 45-46N LONG 124-19W SDG 146 WEA 05
 SECD1 BA 15 CL 6 AMT 8 DRY 10.9 WET 10.3 RELHU 90 VIS 7
 WVEL 10 DIR 36 SEA 2 DIR 36 SWL 0 DIR WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.95	30.477	23.12	6.46				0.32	4.02	
A	3	11.94	30.454	23.10	6.47				0.30	3.09	
	4										
	6	11.95	30.467	23.11	6.46						
A	10	11.14	31.441	24.01	6.59						
	14										
	15	10.31	31.954	24.55	6.61				0.50	5.09	
	20	9.98	32.168	24.77	6.24						
	25	9.59	32.405	25.02	5.86						
A	29										
	30	9.39	32.532	25.15	5.78				0.39	1.28	
	40	9.22	32.720	25.32	5.28						
	60	8.79	33.116	25.70	3.67						
	80	8.10	33.586	26.17	2.17						
	100	7.59	33.816	26.43	2.65						

STATION 287-035 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	11.95		30.477		23.12	476.4	0.000	6.46	
10	11.14		31.441		24.01	391.5	0.044	6.59	
20	9.98		32.168		24.77	319.1	0.079	6.24	
30	9.39		32.532		25.15	283.1	0.110	5.78	
50	9.03	0.01	32.912	0.002	25.50	249.8	0.163	4.52	0.04
75	8.28	0.01	33.476	0.010	26.06	197.3	0.219	2.45	0.06
100	7.59		33.816		26.43	162.8	0.264	2.65	

STATION 287-036 OBSERVED VALUES

DATE 5/17/61 HR 04 LAT 45-47N LONG 124-05W SDG 77 WEA 02
 SECD1 BA 15 CL 6 AMT 8 DRY 11.0 WET 10.6 RELHU 94 VIS 7
 WVEL 8 DIR 35 SEA 2 DIR 36 SWL 0 DIR WA 16

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.98	31.113	23.60	6.27				0.30	2.02	
	3	11.96	31.115	23.61	6.42						
P	6	11.95	31.134	23.62	6.34				0.30	1.72	
	10	10.78	31.865	24.40	6.65						
	14	10.43	32.085	24.63	6.61						
	19	10.07	32.275	24.84	6.42				1.13	7.42	
A	20										
	24	9.86	32.444	25.00	6.24						
	29	9.38	32.599	25.20	6.06						
	38	9.14	32.771	25.37	5.57				0.31	1.13	
A	39										
	58	8.70	33.272	25.83	4.15						
	77	7.92	33.686	26.28	3.07						

STATION 287-036 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.98		31.113		23.60	429.9	0.000	6.27	
10	10.78		31.865		24.40	354.2	0.040	6.65	
20	10.03	0.01	32.310	0.000	24.87	309.4	0.073	6.38	0.00
30	9.33	0.01	32.621	0.003	25.23	275.7	0.102	6.01	0.00
50	8.89	0.02	33.066	0.009	25.64	236.3	0.153	4.73	0.03
75	8.02	---	33.645	---	26.23	181.1	0.206	3.17	---

STATION 287-037 OBSERVED VALUES													
DATE	5/17/61	HR	08	LAT	45-57N	LONG	124-23W	SDG	139	WEA	02		
SECD1	BA 16	CL		AMT	9	DRY	10.8	WET	10.1	RELHU	87	VIS	7
WVEL	7	DIR	35	SEA	1	DIR	35	SWL	0	DIR	WA	05	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P 1	0	12.03	29.107	22.04	6.43				0.60	5.71			
A 1	5	11.95	29.207	22.13	6.44				0.42	2.86			
1	6	11.50	30.636	23.32	6.44								
1	10	11.09	31.491	24.05	6.59								
1	15	9.86	32.029	24.68	6.57								
A 1	16								2.27	8.32			
1	20	9.68	32.342	24.95	5.64								
1	25	9.60	32.560	25.14	5.36								
1	30	9.48	32.631	25.21	5.26								
A 1	32								0.36	0.89			
1	40	9.16	32.899	25.47	4.63								
1	60	8.56	33.288	25.87	3.86								
1	80	7.78	33.725	26.33	2.74								
1	100	7.42	33.838	26.47	2.49								
1	125	6.85	33.934	26.62	2.21								

STATION 287-037 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	12.03		29.107		22.04	579.0	0.000	6.43	
10	11.09		31.491		24.05	387.0	0.049	6.59	
20	9.68		32.342		24.95	301.5	0.083	5.64	
30	9.48		32.631		25.21	277.1	0.112	5.26	
50	8.87	0.01	33.103	0.010	25.68	233.3	0.163	4.23	0.04
75	7.96	0.02	33.629	0.012	26.22	181.5	0.215	3.00	0.04
100	7.42		33.838		26.47	158.8	0.258	2.49	

STATION 287-038														OBSERVED VALUES													
DATE		5/17/61		HR 11		LAT 45-58N		LONG 124-05W		SDG 75		WEA 50															
SECDI		BA 16		CL 0		AMT 9		DRY 10.1		WET 10.1		RELHU 99		VIS 7													
WVEL		6		DIR 00		SEA 2		DIR 36		SWL 0		DIR															
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S																
P	1	12.05	30.309	22.97	6.40	0.24	7	0.0	0.30	3.50	33.04																
	3	12.04	30.307	22.97	6.34	0.24	8	0.0	0.34	3.45																	
	4																										
A	1	12.06	30.306	22.96	6.35	0.24	5	0.0																			
	10	11.70	31.263	23.77	6.43	0.30	3	0.0																			
	13																										
A	1	11.21	31.810	24.28	6.48	0.29	4	0.0	0.42	3.40																	
	20	10.99	31.959	24.43	6.54	0.33	2	0.0																			
	25	10.60	32.091	24.60	6.47	0.33	3	0.2																			
A	1	27																									
	30	10.32	32.202	24.74	6.43	0.45	5	0.5	0.70	2.17																	
	40	9.09	32.673	25.31	5.56	1.01	11	9.3																			
1	60	8.54	33.278	25.86	3.87	1.53	26	17.8																			

STATION 287-038 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.05		30.309		22.97	490.5	0.000	6.40	
10	11.70		31.263		23.77	414.2	0.046	6.43	
20	10.99		31.959		24.43	350.9	0.084	6.54	
30	10.32		32.202		24.74	322.1	0.118	6.43	
50	8.50	----	33.032	-----	25.68	233.1	0.173	4.71	----

STATION 287-039 OBSERVED VALUES

DATE 5/17/61 HR 16 LAT 46-07N LONG 124-04W SDG 29 WEA 02
 SECDI BA 17 CL 0 AMT 8 DRY 10.8 WET 10.3 RELHU 94 VIS 6
 WVEL 6 DIR 36 SEA 2 DIR 34 SWL 1 DIR 32 WA 04

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.11	24.771	18.68	6.45	0.35	45	0.2	0.94	14.64	
A	3	11.78	28.089	21.30	6.36	0.30	21	0.1	0.90	11.91	
P	6	11.21	30.003	22.88	6.15	0.47	14	0.0	0.60	6.72	
A	10	10.95	31.187	23.84	6.09	0.40	7	0.0	0.44	7.13	
	12										
	15	10.68	31.521	24.15	5.99	0.45	6	1.1			
	20	10.29	31.875	24.49	5.82	0.75	11	2.0			
	25	9.68	32.325	24.94	5.58	0.96	14	6.1			

STATION 287-039 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.11		24.771		18.68	901.7	0.000	6.45	
10	10.95		31.187		23.84	407.1	0.066	6.09	
20	10.29		31.875		24.49	345.7	0.104	5.82	

STATION 287-040 OBSERVED VALUES

DATE 5/17/61 HR 19 LAT 46-04N LONG 124-18W SDG 110 WEA 02
 SECD1 BA 18 CL 0 AMT 8 DRY 12.3 WET 11.2 RELHU 88 VIS 6
 WVEL 8 DIR 34 SEA 2 DIR 34 SWL 1 DIR 32 WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	1	12.58	21.368	15.98	6.64	0.66	76	0.9	1.92	9.42	118.34
A	1	12.56	21.350	15.97	6.63	0.59	73	0.2	1.77	13.76	87.66
A	5	12.23	22.171	16.66	6.60	0.62	42	0.2	1.09	9.27	17.78
A	1	11.71	27.845	21.12	6.17	0.54	9	0.0	0.38	2.23	0.66
	11										
	15	11.20	31.240	23.84	6.33						
	1	11.11	31.583	24.12	6.40						
	1	10.93	31.975	24.46	6.44						
	1	10.48	31.745	24.36	6.51						
	40	9.90	32.200	24.81	6.29						
	1	8.84	32.845	25.48	5.03						
	1	7.30	33.819	26.47	2.24						
	1	6.33	33.995	26.74	1.68						
	100										

STATION 287-040 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.58		21.368		15.98	1162.7	0.000	6.64	
10	11.71		27.845		21.12	667.2	0.092	6.17	
20	11.11		31.583		24.12	380.7	0.144	6.40	
30	10.48		31.745		24.36	358.5	0.181	6.51	
50	9.39	0.03	32.524	0.028	25.14	284.1	0.246	5.82	0.02
75	7.68	0.03	33.597	0.035	26.24	179.9	0.304	2.90	0.12
100	6.33		33.995		26.74	132.8	0.343	1.68	

STATION 287-041 OBSERVED VALUES

DATE 5/17/61 HR 22 LAT 46-05N LONG 124-33W SDG 148 WEA 01
 SECD 1 BA 18 CL 0 AMT 7 DRY 11.6 WET 10.9 RELHU 94 VIS 7
 WVEL 8 DIR 31 SEA 2 DIR 35 SWL 1 DIR 32 WA 15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.42	23.736	17.83	6.68				0.69	20.01	
A	2								0.90	15.32	
	3	12.34	34.733	26.34	6.64						
P	6	11.01	31.113	23.77	6.16				0.61	10.30	
A	10	10.90	31.500	24.09	6.28				0.20	2.12	
	12										
	14	10.95	31.634	24.19	6.31						
	19	10.96	31.698	24.24	6.35						
	24	10.92	31.730	24.27	6.34						
	29	10.87	31.759	24.30	6.35						
	39	10.44	31.946	24.52	6.29						
	58	10.63	32.383	24.83	6.20						
	77	8.92	33.064	25.64	4.22						
	97	8.05	33.583	26.18	3.09						
	121	6.58	33.955	26.67	1.84						

STATION 287-041 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.42		23.736		17.83	983.8	0.000	6.68	
10	10.90		31.490		24.09	383.2	0.069	6.28	
20	10.95	0.00	31.706	0.001	24.24	369.0	0.106	6.35	0.00
30	10.83	0.01	31.773	0.002	24.32	362.2	0.143	6.35	0.00
50	10.59	0.13	32.178	0.006	24.67	328.6	0.212	6.35	0.08
75	9.12	0.04	32.991	0.007	25.55	245.8	0.284	4.45	0.04
100	7.89	---	33.644	---	26.25	179.7	0.337	2.93	---

STATION 287-042 OBSERVED VALUES

DATE 5/18/61 HR 03 LAT 46-04N LONG 125-00W SDG 1481 WEA 02
 SECD1 BA 17 CL 6 AMT 7 DRY 11.1 WET 10.3 RELHU 90 VIS 7
 WVEL 1 DIR 35 SEA 2 DIR 35 SWL 1 DIR 29 WA 41.25

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	2	9	12.09	29.664	22.46	6.44				0.66 0.58	1.18 2.31	
P B	2	18	11.44	32.246	24.58	6.48						
	2		10.96	32.448	24.82	6.12				0.39 0.18	0.79 0.50	
	2	27	10.55	32.496	24.93	6.52						
	2	36	10.12	32.549	25.04	6.52						
	2	54	9.42	32.632	25.22	6.32						
	2	72	8.81	32.769	25.42	5.80						
	2	91	8.94	33.266	25.79	4.46						
	2	113	8.30	33.582	26.14	3.64						
	1	133	7.73	33.797	26.39							
	2	136	7.68	33.799	26.40	3.07						
	2	159	7.29	33.857	26.50	3.02						
	1	199	7.00	33.934	26.60							
	1	334	5.94	34.021	26.81							
	1	521	4.92	34.141	27.03							
	1	752	4.08	34.307	27.25							

STATION 287-042 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.09	0.00	29.664	0.037	22.46	538.9	0.000	6.44	0.02
10	11.38	0.00	32.331	0.005	24.65	329.9	0.044	6.43	0.03
20	10.87	0.00	32.465	0.000	24.85	311.5	0.076	6.19	0.01
30	10.40	0.00	32.514	0.000	24.97	300.5	0.107	6.55	0.01
50	9.56	0.00	32.613	0.002	25.18	280.1	0.165	6.39	0.00
75	8.83	0.03	32.842	0.013	25.48	252.4	0.231	5.60	0.03
100	8.73	0.03	33.417	0.008	25.94	208.7	0.289	4.06	0.02
150	7.41	0.01	33.840	0.010	26.48	158.6	0.381	2.98	---
200	6.99	0.00	33.935	0.000	26.60	147.3	0.457		
250	6.59	0.02	33.983	0.010	26.69	139.2	0.529		
300	6.20	0.01	34.012	0.008	26.77	132.7	0.597		
400	5.53	0.01	34.063	0.001	26.89	121.7	0.724		
500	5.01	0.00	34.127	0.000	27.00	111.8	0.841		
600	4.58	---	34.196	---	27.11	102.6	0.948		
700	4.23	---	34.268	---	27.20	94.0	1.046		

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STATION 287-043 OBSERVED VALUES														
DATE	5/18/61	HR	16	LAT	46-21N	LONG	125-44W	SDG	2400	WEA	44			
SECDI	BA	18	CL	0	AMT	8	DRY	9.3	WET	9.1	RELHU	95	VIS	3
WVEL	8	DIR	35	SEA	2	DIR	35	SWL	1	DIR	30	WA	09, 09, 08, 7--	25
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL--A	PROD-I	PROD-S			
P	0	11.08	32.521	24.85	6.40	0.52	3	0.7	0.26		60.90			
	10	11.08	32.506	24.84	6.43	0.47	4	0.5						
	20	11.05	32.503	24.85	6.51	0.67	6	0.7						
	30	10.23	32.538	25.01	6.29	0.62	5	2.1						
	40	9.93	32.590	25.11	6.62	0.64	7	2.5						
	60	9.20	32.599	25.23	6.50	0.70	10	4.7						
	80	8.63	32.680	25.38	6.10	0.88	12	8.4						
	99	8.20	33.345	25.97	4.57	1.42	26	18.7						
	123	7.99	33.632	26.22	3.62	1.62	31	20.3						
	149	7.91	33.753	26.33	3.14	1.82	37	21.2						
4	174	7.52	33.880	26.49	2.76	1.96	46	23.5						
1	288	6.21	34.008	26.76	1.92	2.37	64	32.0						
1	520	4.85	34.161	27.05	0.60	2.62	104	36.5						
1	739	4.09	34.286	27.23	0.32	2.90	118	32.0						
5	1526	2.42	34.546	27.60	0.92	2.68	174	34.0						
5	1990	1.88	34.616	27.70	1.68	2.72	189	34.5						

STATION 287-043 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)	PROD-S
0	11.08		32.521		24.85	310.5	0.000	6.40		
10	11.08		32.506		24.84	311.8	0.032	6.43		
20	11.05		32.503		24.85	311.7	0.063	6.51		
30	10.23		32.538		25.01	295.8	0.093	6.29		
50	9.57	0.01	32.598	0.008	25.17	281.3	0.151	6.64	0.03	
75	8.76	0.00	32.627	0.018	25.32	267.4	0.219	6.27	0.03	
100	8.19	0.00	33.365	0.003	25.98	204.7	0.278	4.51	0.00	
150	7.90	0.00	33.758	0.000	26.34	172.2	0.373	3.12	0.00	
200	7.17	0.01	33.943	0.021	26.58	149.1	0.453	2.50	0.04	
250	6.58	0.01	34.008	0.026	26.72	137.1	0.525	2.11	0.05	
300	6.11	0.01	34.018	0.001	26.78	131.0	0.592	1.83	0.00	
400	5.41	0.05	34.092	0.005	26.93	118.0	0.716	1.18	0.02	
500	4.92	0.02	34.151	0.002	27.03	108.9	0.830	0.68	0.01	
600	4.54	0.01	34.209	0.000	27.12	101.0	0.935	0.43	0.03	
700	4.20	0.01	34.265	0.000	27.20	93.9	1.032	0.33	0.02	
800	3.91	0.01	34.315	0.001	27.27	87.8	1.123	0.31	0.02	
1000	3.39	0.03	34.398	0.004	27.39	77.2	1.288	0.33	0.06	
1200	2.95	0.03	34.467	0.005	27.49	68.5	1.433	0.47	0.07	
1500	2.45	0.00	34.541	0.001	27.59	59.0	1.625	0.87	0.01	

STATION 287-043A OBSERVED VALUES

DATE	5/18/61	HR	19	LAT	46-18N	LONG	125-33W	SDG	WEA	28
SECDI	22	BA	18	CL		WET <td></td> <td>RELHU</td> <td>VIS</td> <td></td>		RELHU	VIS	
WVEL	9	DIR	33	SEA		DIR		WA		
DEPTH		PHOS.		SIL.		NITR.		CHL-A		PROD-S
A	0	0.76		11		1.0		0.35		23.86
A	9	0.76		10		1.0		0.24		23.14
A	29	0.93		10		2.5		0.12		5.32
A	58	0.95		9		2.5		0.17		0.00

STATION 287-044 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	11.34		32.529		24.81	314.3	0.000	6.54	
10	11.30		32.518		24.81	314.7	0.032	6.53	
20	11.16		32.518		24.84	312.5	0.063	6.59	
30	10.96	0.02	32.526	0.003	24.88	308.7	0.094	6.62	0.00
50	9.87	0.07	32.672	0.017	25.18	280.6	0.153	6.34	0.01
75	9.04	0.02	32.798	0.001	25.41	258.9	0.221	5.81	0.01
100	8.60	0.01	33.182	0.003	25.78	224.3	0.281	4.90	0.01
150	7.68	0.00	33.777	0.001	26.38	167.7	0.379	3.53	0.01
M									
200	7.16	0.11	34.018	0.032	26.64	143.5	0.457	2.12	0.16
250	6.43	0.06	34.131	0.018	26.83	126.0	0.524	1.78	0.12
300	5.86	0.03	34.183	0.020	26.95	115.6	0.585	1.60	0.00
400	5.24	0.05	34.272	0.061	27.09	102.5	0.694	1.01	0.00
M									
500	4.88	0.02	34.316	0.067	27.17	96.1	0.793	0.62	0.02
600	4.58	0.03	34.314	0.041	27.20	93.8	0.888	0.41	0.02
700	4.33	0.00	34.296	0.001	27.21	93.1	0.982	0.32	0.01
800	4.02	0.01	34.345	0.003	27.29	86.8	1.071	0.30	0.02
1000	3.46	---	34.437	---	27.41	75.1	1.233	0.35	---
1200	3.04	---	34.499	---	27.50	67.0	1.376	0.45	---
1500	2.63	---	34.548	---	27.58	60.5	1.567	0.73	---

STATION 287-045 OBSERVED VALUES

DATE 5/19/61 HR 05 LAT 46-14N LONG 124-36W SDG 502 WEA 01
 SECDI BA 15 CLX AMT 0 DRY 12.5 WET 11.7 RELHU 91 VIS 6
 WVEL 7 DIR 36 SEA 3 DIR 36 SWL 1 DIR 36 WA 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.55	29.785	22.47	6.33				0.21	3.07	
A	3	12.53	29.786	22.48	6.37				0.32	2.38	
	4										
	6	12.54	29.799	22.48	6.40						
	10	12.37	30.005	22.67	6.43						
A	14										
	15	11.19	31.551	24.08	6.70				0.61	4.02	
	20	10.66	31.912	24.46	6.66						
	25	10.27	32.003	24.59	6.78						
A	27										
	30	9.89	32.112	24.74	6.28				1.29	6.31	
	39	9.39	32.467	25.10	6.28						
	59	9.00	32.597	25.26	5.99						
	79	8.59	32.950	25.60	5.16						
	98	8.14	33.616	26.19	3.19						
	123	7.58	33.789	26.41	2.39						
	148	7.31	33.856	26.50	2.00						
	176	6.99	33.914	26.59	1.97						

STATION 287-045 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	12.55		29.785		22.47	538.0	0.000	6.33	
10	12.37		30.005		22.67	518.8	0.053	6.43	
20	10.66		31.912		24.46	348.9	0.097	6.66	
30	9.89		32.112		24.74	322.0	0.130	6.28	
50	9.12	0.04	32.581	0.047	25.23	275.7	0.190	6.18	0.01
75	8.68	0.00	32.856	0.004	25.51	249.1	0.256	5.40	0.02
100	8.09	0.00	33.646	0.009	26.22	182.4	0.310	3.08	0.02
150	7.29	---	33.861	---	26.50	156.1	0.394	1.98	---

STATION 287-046 OBSERVED VALUES									
DATE	5/19/61	HR	08	LAT	46-17N	LONG	124-21W	SDG	219
SECD1	BA	14	CL	AMT	9	DRY	12.2	WET	11.7
WVEL	9	DIR	36	SEA	3	DIR	36	WA	04
						SWL	1	DIR	36
								RELHU	94
								WA	04
								WEA	02
								VIS	7
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
P	1	12.21	29.692	22.46	6.47				0.37
P	3	12.21	29.707	22.47	6.47				0.20
	6	12.21	29.718	22.48	6.48				
A	10	11.67	31.116	23.66	6.70				
	11								0.34
	15	10.85	31.743	24.29	6.72				
	20	10.42	31.959	24.53	6.75				
A	22	9.73	32.126	24.78	6.11				0.76
	25	9.49	32.285	24.94	5.80				
	30								
	40	9.03	32.595	25.25	5.80				
	60	8.89	32.983	25.58	4.73				
	80	8.45	33.379	25.96	3.40				
	100	6.80	33.948	26.64	1.86				
	125	6.07	34.031	26.80	1.11				
	150	5.88	34.024	26.82	1.47				
	175	5.85	34.042	26.84	1.52				

STATION 287-046 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.21		29.692		22.46	538.9	0.000	6.47	
10	11.67		31.116		23.66	424.5	0.049	6.70	
20	10.42		31.959		24.53	341.6	0.087	6.75	
30	9.49		32.285		24.94	302.9	0.119	5.80	
50	8.91	0.06	32.808	0.013	25.44	255.8	0.175	5.37	0.05
75	8.63	0.03	33.272	0.005	25.84	217.7	0.234	3.75	0.00
100	6.80		33.948		26.64	142.4	0.279	1.86	
150	5.88		34.024		26.82	125.8	0.346	1.47	

STATION 287-047 OBSERVED VALUES

DATE 5/19/61 HR 13 LAT 46-14N LONG 124-12W SDG 42 WEA 02
 SECDI BA 12 CL AMT 0 DRY 13.4 WET 12.7 RELHU 90 VIS 7
 WVEL 1 DIR 35 SEA 1 DIR 36 SWL 1 DIR 27 WA 04

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	11.64	25.866	19.61	6.18				3.54	28.21	250.40
A 1	1								1.31	12.10	
	3	11.70	28.686	21.78	6.41						
A 1	4								0.91	10.17	
	6	11.44	30.935	23.56	6.34						
A 1	8								0.67	9.36	
	10	11.31	31.233	23.82	6.29						
	15	11.22	31.379	23.94	6.19						
	20	10.35	32.136	24.68	5.36						
	25	9.48	32.542	25.14	5.11						

294

STATION 287-047 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.64		25.866		19.61	812.7	0.000	6.18	
10	11.31		31.233		23.82	409.8	0.062	6.29	
20	10.35		32.136		24.68	327.3	0.098	5.36	

STATION 287-048 OBSERVED VALUES

DATE 5/19/61		HR 17		LAT 46-23N		LONG 124-16W		SDG 71		WEA 02	
SECD 1		BA 13		AMT 0		DRY 15.6		WET 13.1		RELHU 76	
WVEL 4		DIR 03		SEA 2		DIR 36		SWL 1		DIR 31	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	12.05	30.821	23.36	6.48			1.06	25.38	
A	1	3	11.81	30.810	23.40	6.55			0.94	32.43	
	4										
	6	11.53	30.804	23.44	6.52						
A	1	10	11.38	31.001	23.62	6.52			0.65	11.90	
	12										
	15	10.48	31.796	24.40	6.36						
	20	10.48	31.862	24.45	6.47				0.46	2.72	
A	1	24									
	25	10.15	32.073	24.67	6.24						
	30	9.86	32.185	24.80	5.94						
	40	9.27	32.636	25.25	5.04						
1	59	7.29	33.798	26.45	2.15						

STATION 287-048 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.05		30.821		23.36	452.7	0.000	6.48	
10	11.38		31.001		23.62	428.1	0.045	6.52	
20	10.48		31.862		24.45	349.7	0.083	6.47	
30	9.86		32.185		24.80	316.1	0.117	5.94	
50	8.37	---	33.198	---	25.83	218.9	0.170	3.71	---

STATION 287-049 OBSERVED VALUES													
DATE	5/19/61	HR	22	LAT	46-26N	LONG	124-30W	SDG	154	WEA	02		
SECDI	BA	12	CL	AMT	0	DRY	13.3	WET	12.8	RELHU	94	VIS	7
WVEL	6	DIR	36	SEA	2	DIR	30	SWL	1	DIR	27	WA	06
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
1	0	12.60	29.869	22.53									
1	3	12.58	29.862	22.52	6.51								
1	6	11.79	30.284	23.00	6.52								
1	10	10.34	31.624	24.29	6.91								
1	15	9.71	32.129	24.78	5.97								
1	20	9.41	32.371	25.02	5.88								
1	25	9.42	32.552	25.16	6.52								
1	30	9.09	32.553	25.21	6.46								
1	40	8.75	32.591	25.29	6.31								
1	60	8.42	33.235	25.85	4.31								
1	80	7.96	33.618	26.22	3.24								
1	100	7.43	33.848	26.47	2.44								
1	125	6.86	33.953	26.64	2.16								

STATION 287-049 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	12.60		29.869		22.53	532.7	0.000	6.48					
10	10.34		31.624		24.29	364.9	0.045	6.91					
20	9.41		32.371		25.02	295.2	0.078	5.88					
30	9.09		32.553		25.21	277.0	0.107	6.46					
50	8.56	0.02	32.882	0.042	25.55	245.2	0.159	5.39	0.13				
75	8.08	0.00	33.542	0.003	26.14	189.7	0.214	3.45	0.02				
100	7.43		33.848		26.47	158.2	0.257	2.44					

STATION 287-050 OBSERVED VALUES													
DATE	5/20/61	HR 02	LAT 46-27N	LONG 124-52W	SDG 1225	WEA 02							
SECDI	BA 12	CL 2	AMT 8	DRY 13.4	WET 12.8	RELHU 93	VIS 7						
WVEL	9	DIR 36	SEA 2	DIR 36	SWL 0	DIR	WA 20, 33						
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	13.00	29.645	22.28	6.41	0.43	15	0.0	0.44	5.51		
A	2	8	12.86	29.778	22.41	6.42	0.46	14	0.0		3.72		
A	15									0.49	3.30		
A	2	10.90	32.254	24.68	6.75	0.69	10	0.0					
A	2	9.89	32.392	24.96	6.62	0.78	8	2.0	0.62	3.47			
	34	9.26	32.534	25.17	6.43	1.02	11	5.0					
	50	8.85	32.621	25.30	6.20	1.12	15	7.9					
	71	8.48	33.004	25.66	5.15	1.69	26	15.2					
	84	8.18	33.491	26.08	3.92	2.13	38	23.1					
	109	7.91	33.764	26.34	3.14	2.45	47	27.7					
	132	7.64	33.842	26.44	2.77	2.61	45	29.7					
	153	7.32	33.906	26.53	2.27	2.72	52	31.5					
	176	7.01	33.927	26.59	2.02	2.86	57	32.5					
	264	6.33	34.002	26.74	1.77	2.87	67	35.0					
	445	5.02	34.114	26.99	0.91	3.42	98	38.5					
	681	4.19	34.292	27.23	0.35	3.71	127	40.3					
	1050	3.42	34.427	27.41	0.35	3.93	148	41.6					

STATION 287-050 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	13.00		29.645		22.28	556.4	0.000	6.41	
10	12.47	0.08	30.328	0.142	22.90	496.7	0.053	6.50	0.02
20	10.46	0.01	32.420	0.075	24.88	308.0	0.093	6.73	0.01
30	9.49	0.01	32.476	0.002	25.09	288.8	0.123	6.51	0.00
50	8.85		32.621		25.30	268.7	0.179	6.20	
75	8.38	0.01	33.156	0.015	25.79	222.6	0.240	4.77	0.04
100	7.99	0.02	33.727	0.026	26.30	174.9	0.290	3.28	0.06
150	7.37	0.00	33.898	0.001	26.52	154.4	0.372	2.34	0.01
200	6.78	0.03	33.949	0.000	26.64	143.5	0.447	1.90	0.04
250	6.41	0.02	33.991	0.000	26.72	136.2	0.517	1.78	0.03
300	6.04	0.01	34.026	0.002	26.80	129.6	0.583	1.60	0.02
400	5.31	0.01	34.088	0.002	26.94	117.2	0.707	1.13	0.03
500	4.77	0.02	34.157	0.003	27.06	106.6	0.819	0.73	0.01
600	4.40	0.03	34.233	0.004	27.16	97.7	0.921	0.48	0.01
700	4.13	---	34.303	---	27.24	90.3	1.015	0.32	---
800	3.87	---	34.355	---	27.31	84.3	1.102	0.23	---
1000	3.49	---	34.419	---	27.40	76.7	1.263	0.29	---

M M M M

STATION 287-051 OBSERVED VALUES

DATE 5/20/61 HR 07 LAT 46-33N LONG 125-22W SDG 1900 WEA 02
 SECDI BA 15 CL AMT 0 DRY 11.4 WET 10.6 RELHU 94 VIS 7
 WVEL 15 DIR 35 SEA 3 DIR 32 SWL 3 DIR 32 WA 35.18

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	11.57	32.295	24.59	6.44				0.44	3.46	
A	2	10	11.59	32.290	24.58	6.44				0.25	4.13	
	2	19	11.45	32.345	24.65	6.47						
A	2	27	10.45	32.531	24.97	6.66			0.31		1.72	
	2	38	10.28	32.546	25.01	6.66						
	54											
A	2	57	9.06	32.721	25.35	5.85			0.19		0.48	
	2	76	8.68	33.173	25.76	4.66						
	2	93	8.26	33.575	26.14							
	2	116	7.96	33.761	26.33	3.10						
	2	142	7.67	33.837	26.43	2.76						
	2	163	7.44	33.902	26.51	2.61						
	2	187	7.17	33.922	26.57	2.40						
	1	227	6.68	33.970	26.67	2.12						
	1	394	5.70	34.049	26.86	1.32						
	1	610	4.65	34.197	27.10	0.44						
	1	881	3.73	34.369	27.33	0.29						
	1	1399	2.62	34.526	27.56	0.74						

STATION 287-051 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.57		32.295		24.59	335.6	0.000	6.44	
10	11.59		32.280		24.58	336.5	0.034	6.44	
20	11.35	0.03	32.365	0.005	24.69	327.1	0.067	6.49	0.01
30	10.42	0.02	32.535	0.003	24.98	299.1	0.099	6.67	0.00
50	9.53	0.08	32.629	0.003	25.20	278.4	0.156	6.23	0.03
75	8.69	0.01	33.146	0.002	25.74	227.9	0.220	4.72	0.01
100	8.15	0.01	33.659	0.011	26.22	182.3	0.271	3.57	0.00
150	7.58	0.00	33.864	0.002	26.46	159.9	0.356	2.70	0.01
200	7.01	0.01	33.937	0.001	26.60	147.4	0.433	2.30	0.00
250	6.49	0.03	33.986	0.004	26.71	137.6	0.505	1.99	0.01
300	6.14	0.06	34.015	0.009	26.78	131.6	0.572	1.73	0.02
400	5.67	0.00	34.053	0.000	26.87	124.1	0.700	1.29	0.00
500	5.15	0.00	34.119	0.003	26.98	114.0	0.819	0.84	0.02
600	4.69	0.00	34.180	0.000	27.09	104.3	0.928	0.47	0.00
700	4.31	0.01	34.258	0.002	27.19	95.6	1.028	0.32	0.03
800	3.97	0.01	34.322	0.002	27.27	87.9	1.120	0.27	0.03
1000	3.40	---	34.425	---	27.41	75.3	1.283	0.31	---
1200	2.95	---	34.492	---	27.51	66.5	1.425	0.45	---

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STATION 287-052 OBSERVED VALUES

DATE 5/20/61 HR 11 LAT 46-37N LONG 125-00W SDG 1283 WEA 02
 SECD1 BA 16 CL AMT 9 DRY 11.8 WET 10.4 RELHU 94 VIS 7
 WVEL 6 DIR 33 SEA 3 DIR 32 SWL DIR WA 05.03

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	12.87	29.190	21.95	6.28						
2	10	11.29	32.069	24.47	6.72						
2	20	10.46	32.322	24.81	6.61						
2	30	9.50	32.524	25.12	6.55						
2	40	9.19	32.587	25.22	6.40						
2	60	8.94	32.960	25.55	5.23						
2	80	8.56	33.392	25.95	4.13						
2	99	8.23	33.642	26.20	3.38						
2	124	7.80	33.822	26.40	2.96						
2	152	7.45	33.877	26.49	2.74						
2	176	7.13	33.920	26.57	2.32						
1	201	6.88	33.951	26.63	2.04						
1	297	6.06	34.015	26.79	1.72						
1	495	4.93	34.151	27.03	0.75						
1	744	3.94	34.344	27.29	0.34						

STATION 287-052 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	12.87		29.180		21.95	587.7	0.000	6.28	
10	11.29		32.069		24.47	347.7	0.047	6.72	
20	10.46		32.322		24.81	315.3	0.080	6.61	
30	9.50		32.524		25.12	285.4	0.110	6.55	
50	9.04	0.03	32.749	0.011	25.37	262.1	0.165	5.88	0.05
75	8.66	0.01	33.289	0.007	25.85	216.8	0.225	4.39	0.01
100	8.21	0.00	33.652	0.000	26.21	183.7	0.275	3.35	0.00
150	7.47	0.00	33.876	0.002	26.49	157.5	0.360	2.76	0.01
200	6.89	0.00	33.940	0.000	26.63	144.8	0.436	2.05	0.00
250	6.44	0.00	33.989	0.004	26.72	136.7	0.506	1.81	0.05
300	6.04	0.00	34.017	0.000	26.79	130.2	0.573	1.70	0.00
400	5.41	0.02	34.084	0.000	26.92	118.6	0.698	1.21	0.04
500	4.91	---	34.155	---	27.04	108.4	0.811	0.73	---
600	4.45	---	34.229	---	27.15	98.6	0.914	0.47	---
700	4.08	---	34.308	---	27.25	89.3	1.008	0.35	---

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STATION 287-053 OBSERVED VALUES													
DATE	5/20/61	HR	14	LAT	46-35N	LONG	124-36W	SDG	183	WEA	02		
SECD1	BA	21	CL	AMT	9	DRY	12.2	WET	10.6	RELHU	82	VIS	7
WVEL	4	DIR	33	SEA	2	DIR	33	SWL	1	DIR	34	WA	00
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	12.96	28.496	21.40	6.43				0.56	4.76	44.30		
	3	12.97	28.501	21.40	6.38								
P	1	12.97	28.692	21.55	6.43				0.53	2.80			
	10	12.52	29.225	22.04	6.46								
	15	11.15	31.229	23.84	6.70								
P	1	10.51	31.681	24.30	6.76				0.90	4.87			
	25	10.11	31.844	24.50	6.61								
	30	9.59	32.152	24.82	6.12								
	40	9.10	32.589	25.24	5.15								
A	1	8.62	33.163	25.76	4.23				0.31	1.23			
	60	8.14	33.557	26.14	3.28								
	80												
	100	7.80	33.759	26.35	2.71								
	125	7.17	33.897	26.55	1.95								
	150	6.95	33.934	26.61	1.92								
	175	6.35	34.001	26.74	1.86								

STATION 287-053 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)				
0	12.96		28.496		21.40	640.5	0.000	6.43					
10	12.52		29.225		22.04	579.0	0.061	6.46					
20	10.51		31.681		24.30	363.6	0.109	6.76					
30	9.59		32.152		24.82	314.3	0.143	6.12					
50	8.82	0.03	32.912	0.009	25.53	246.7	0.199	4.61	0.06				
75	8.25	0.00	33.476	0.000	26.06	197.0	0.254	3.50	0.01				
100	7.80		33.759		26.35	169.9	0.300	2.71					
150	6.95		33.934		26.61	146.1	0.379	1.92					

STATION 287-054 OBSERVED VALUES													
DATE	5/20/61	HR	16	LAT	46-34N	LONG	124-24W	SDG	82	WEA	02		
SECD1	BA	22	CL	AMT	9	DRY	11.6	WET	10.6	RELHU	88	Vis	
WVEL	3	DIR	33	SEA	3	DIR	33	SWL	1	DIR	34	WA	05
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	12.62	28.923	21.79	6.43				0.45	12.17			
A	3	12.56	28.975	21.84	6.43				0.59	11.67			
	4												
	6	11.96	29.703	22.52	6.55								
A	10	11.37	30.755	23.43	6.52								
	13												
	15	10.70	31.551	24.17	6.47				1.00	17.64			
	20	10.53	31.794	24.39	6.42								
	25	10.39	31.924	24.51	6.38								
A	26												
	30	9.86	32.143	24.77	5.92				0.36	3.18			
	40	9.01	32.565	25.23	5.94								
	60	8.62	33.250	25.83	3.79								

STATION 287-054 INTERPOLATED AND COMPUTED VALUES													
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL.	GEOPOT.	OXY.	E(O)				
0	12.62		28.923		21.79	602.9	0.000	6.43					
10	11.37		30.755		23.43	446.1	0.053	6.52					
20	10.53		31.794		24.39	355.5	0.093	6.42					
30	9.86		32.143		24.77	319.2	0.127	5.92					
50	8.60	---	32.934	---	25.59	241.8	0.183	5.23	---				

STATION 287-055 OBSERVED VALUES

DATE 5/20/61 HR 17 LAT 46-32N LONG 124-10W SDG 31 WEA 02
 SECD1 BA 19 CL AMT 9 DRY 12.2 WET 10.8 RELHU 85 VIS 7
 WVEL 3 DIR 22 SEA 3 DIR 30 SWL 1 DIR 30 WA 03

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.35	30.133	22.78	6.44				1.67	50.96	
A	1	11.74	30.995	23.55	6.35				1.33	51.54	
	6	10.50	31.506	24.17	6.17				1.05	19.04	
A	1	10.23	31.815	24.45	6.20						
	15	10.03	32.023	24.65	5.97						
A	16								0.64	7.38	

STATION 287-055 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.35		30.133		22.78	508.8	0.000	6.44	
10	10.23		31.815		24.45	349.0	0.043	6.20	

STATION 287-056 OBSERVED VALUES

DATE 5/20/61 HR 20 LAT 46-43N LONG 124-14W SDG 40 WEA 03
 SECDI BA 20 CL 0 AMT 8 DRY 12.3 WET 10.6 RELHU 82 VIS 7
 WVEL 4 DIR 28 SEA 2 DIR 28 SWL 1 DIR 30 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	1	11.98	30.351	23.01	6.41	0.75	26	0.4	1.90	10.42	104.70
A	2	11.89	30.385	23.06	6.39	0.69	22	0.2	1.32	10.45	69.58
	3	11.58	30.735	23.38	6.29						
A	6	11.35	30.978	23.61	6.16	0.61	16	0.3	1.77	10.76	10.68
	8	10.98	31.208	23.85	6.04						
	10										
	15										
A	16	10.69	31.485	24.12	5.86				1.50	11.11	0.52
	20	9.96	31.943	24.60	5.88						
	25	9.81	32.123	24.76	5.54						
	30										

STATION 287-056 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.98		30.351		23.01	486.2	0.000	6.41	
10	11.35		30.978		23.61	429.3	0.046	6.16	
20	10.69		31.485		24.12	381.0	0.087	5.86	
30	9.81		32.123		24.76	319.9	0.122	5.54	

STATION 287--057 OBSERVED VALUES

DATE 5/20/61 HR 22 LAT 46-54N LONG 124-16W SDG 37 WEA 02
SECDI BA 21 CL AMT 8 DRY 12.4 WET 11.1 RELHU 88 VIS 7
WVEL 4 DIR 30 SEA 2 DIR 30 SWL 1 DIR 31 WA 05

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	11.86	30.767	23.36	6.40				1.71	11.48	
A	1	1								1.87	11.97	
	1	3	11.79	30.774	23.37	6.40						
A		5										
	1	6	11.24	30.950	23.61	6.18				1.95	12.92	
P	1	10	10.70			6.18				1.83	7.58	
	1	15	9.84			5.41						
	1	20	9.50			5.21						
	1	25	9.17			4.39						

STATION 287-057 INTERPOLATED AND COMPUTED VALUES

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STATION 287-058 OBSERVED VALUES

DATE 5/21/61 HR 00 LAT 47-09N LONG 124-22W SDG 40 WEA 02
 SECD1 BA 20 CL 5 AMT 8 DRY 12.3 WET 10.6 RELHU 82 VIS 7
 WVEL 5 DIR 32 SEA 2 DIR 32 SWL 1 DIR 32 WA 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9	12.16		6.59	0.44	11	0.0	0.24	1.44	
		3	11.93		6.57	0.44	9	0.0			
P	1	6	11.31	30.130	6.59	0.41	8	0.0	0.46	1.73	
		10	10.94	30.999	6.59	0.47	6	0.0			
		15	10.42	31.170	6.61	0.51	7	0.0			
P	1	20	10.23		6.48	0.60	7	0.0	0.44	1.00	
		25	9.73	31.981	6.44	0.76	8	0.6			
		30	9.33	32.185	5.99	1.05	12	4.5			
A		40							0.37	1.23	

STATION 287-058 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.16							6.59	
10	10.94		30.999		23.70	420.9		6.59	
20	10.23		31.560	0.048	24.26	367.3		6.48	
30	9.33		32.185		24.89	307.9		5.99	

STATION 287-059 OBSERVED VALUES

DATE 5/21/61 HR 03 LAT 46-50N LONG 124-26W SDG 82 WEA 03
 SECDI BA 20 CL 6 AMT 8 DRY 11.7 WET 9.2 RELHU 71 VIS 7
 WVEL 3 DIR 29 SEA 2 DIR 29 SWL 1 DIR 31 WA 07

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.61	28.994	21.85	6.54				0.33	5.17	
P	3	12.57	29.028	21.88	6.57				0.37	4.89	
	6	12.05	29.882	22.64	6.65						
A	10	11.13	31.206	23.83	6.63						
	11										
A	15	10.62	31.829	24.40	6.59				0.53	6.23	
	20	10.31	31.948	24.54	6.44						
A	22	10.03	32.075	24.69	6.15				0.26	3.11	
	25	9.66	32.229	24.87	5.73						
	30										
	40	8.97	32.641	25.30	5.76						
	60	8.57	33.274	25.86	3.85						
	79	7.48	33.850	26.47	1.96						

STATION 287-059 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.61		28.994		21.85	597.5	0.000	6.54	
10	11.13		31.206		23.83	408.7	0.051	6.63	
20	10.31		31.948		24.54	340.6	0.088	6.44	
30	9.66		32.229		24.87	309.7	0.121	5.73	
50	8.74	0.09	32.975	0.009	25.60	240.8	0.176	4.97	0.11
75	7.77	---	33.731	---	26.33	171.2	0.227	2.36	---

STATION 287-060 OBSERVED VALUES

DATE		5/21/61		HR 06		LAT 46-49N		LONG 124-52W		SDG 183		WEA 02	
SECD1		BA 21		CL 6		AMT 8		DRY 11.1		WET 8.9		RELHU 75	
WVEL		4 DIR 32		SEA 1		DIR 32		SWL 1		DIR 30		WA 06	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	12.60	28.338	21.35	6.43	0.33	16	0.0	0.42	3.89			
A	1	12.58	28.340	21.35	6.43	0.34	10	0.0	0.46	3.42			
	5												
	6	12.55	28.372	21.38	6.42	0.29	12	0.0					
	10	11.72	29.904	22.71	6.54	0.48	12	0.0					
	15	10.77	32.031	24.53	6.61	0.70	6	0.0					
A	16								0.21	5.74			
	20	10.59	32.189	24.68	6.66	0.79	8	0.3					
	25	10.08	32.330	24.88	6.64	0.74	9	0.8					
	30	9.12	32.546	25.20	6.65	0.97	5	2.6					
A	32								0.30	2.73			
	39	8.85	32.564	25.26	6.44	1.05	8	4.2					
	58	8.57	32.694	25.40	5.96	1.11	11	6.7					
	77	8.17	33.280	25.92	4.51	1.71	24	15.5					
	96	7.81	33.595	26.22	3.75	1.89	26	19.3					
	124	7.77	33.814	26.40	3.00	2.46	41	27.6					
	149	7.37	33.874	26.50	2.58	2.42	42	26.3					
	174	6.95	33.936	26.61	2.09	2.61	50	31.0					

STATION 287-060 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.60		28.338		21.35	645.8	0.000	6.43	
10	11.72		29.904		22.71	514.9	0.059	6.54	
20	10.59		32.189		24.68	327.3	0.101	6.66	
30	9.12		32.546		25.20	278.0	0.131	6.65	
50	8.67	0.02	32.604	0.013	25.32	267.4	0.185	6.22	0.04
75	8.21	0.00	33.214	0.011	25.86	215.9	0.246	4.67	0.03
100	7.80	0.02	33.640	0.003	26.26	178.8	0.295	3.62	0.00
150	7.35	---	33.876	---	26.51	155.8	0.379	2.56	---

STATION 287-061 OBSERVED VALUES

DATE 5/21/61 HR 11 LAT 46-47N LONG 125-21W SDG 2012 WEA 02
 SECD1 BA 19 CL AMT 9 DRY 10.8 WET 8.9 RELHU 84 VIS 7
 WVEL 2 DIR 20 SEA 1 DIR 20 SWL 1 DIR 30 WA 11.00

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	12.58	28.676	21.61	6.34						
2	10	9.78	32.503	25.06	6.55						
2	20	8.87	32.618	25.30	6.25						
2	30	8.82	32.956	25.57	5.27						
2	40	8.48	33.439	26.00	4.03						
2	60	8.13	33.646	26.21	3.54						
2	80	7.99	33.724	26.30	3.21						
2	100	7.90	33.806	26.37	3.05						
2	120	7.76	33.867	26.44	2.90						
2	144	7.63	33.860	26.45	2.84						
1	163	7.34	33.902	26.53	2.56						
1	191	7.07	33.940	26.60	2.53						
1	289	6.16	34.023	26.78	1.62						
1	490	5.01	34.148	27.02	1.06						
1	742	4.13	34.307	27.24	0.28						
1	1044	3.37	34.439	27.42	0.40						
1	1595	2.37	34.561	27.61	0.99						

STATION 287-061 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.58		28.676		21.61	620.4	0.000	6.34	
10	19.78		32.503		25.06	290.9	0.046	6.55	
20	8.87		32.618		25.30	268.7	0.074	6.25	
30	8.82		32.956		25.57	243.1	0.100	5.27	
50	8.26	0.01	33.614	0.037	26.17	186.5	0.143	3.61	0.10
75	8.01	0.00	33.710	0.004	26.28	176.1	0.188	3.28	0.00
100	7.90		33.806		26.37	167.9	0.231	3.05	
150	7.54	0.01	33.872	0.002	26.48	158.8	0.313	2.75	0.01
200	6.98	0.00	33.940	0.001	26.62	146.1	0.389	2.46	0.02
250	6.51	0.01	33.995	0.003	26.72	137.1	0.460	2.03	0.07
300	6.08	0.00	34.031	0.001	26.80	129.7	0.526	1.57	0.02
400	5.44	0.02	34.096	0.003	26.93	118.1	0.650	1.21	0.07
500	4.97	0.00	34.155	0.000	27.03	109.1	0.764	1.02	0.01
600	4.57	0.02	34.210	0.002	27.13	100.7	0.869	0.68	0.04
700	4.25	0.01	34.282	0.001	27.21	93.2	0.966	0.39	0.02
800	3.97	0.00	34.337	0.000	27.28	86.8	1.056	0.25	0.03
1000	3.47	0.00	34.423	0.000	27.40	76.2	1.219	0.34	0.02
1200	3.04	---	34.489	---	27.50	67.8	1.363	0.52	---
1500	2.51	---	34.551	---	27.59	58.9	1.553	0.85	---

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STATION 287-062 OBSERVED VALUES									
DATE	5/21/61	HR	16	LAT	46-54N	LONG	125-41W	SDG	1866
SECD	15	BA	19	CL	6	AMT	8	RELHU	86
WVEL	6	DIR	19	SEA	2	DIR	19	SWL	1
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
									PROD-I
									PROD-S
2	0	12.18	30.761	23.29	6.29	0.52	10	0.0	
2	10	11.64	31.671	24.10	6.44	0.64	8	0.0	
2	19	10.79	32.428	24.83	6.55	0.81	7	1.5	
2	29	10.08	32.560	25.06	6.63	0.96	10	2.8	
2	39	9.96	32.576	25.09	6.65	0.93	11	2.4	
2	58	9.03	32.588	25.25	6.37	1.42	14	6.2	
2	70	8.54	32.722	25.43	5.96	1.24	19	10.7	
2	97	8.62	33.375	25.93	4.27	2.03	30	21.1	
2	121	7.96	33.699	26.28	3.40	2.49	40	26.3	
2	146	7.58	33.844	26.45	2.97	2.50	45	29.4	
2	169	7.14	33.912	26.56	2.73	2.49	52	30.6	
1	192	7.22	33.894	26.54	2.82	2.03	37	21.8	
1	299	6.39	33.991	26.73	2.07	2.22	49	22.3	
1	412	5.30	34.082	26.93	1.06	2.52	70	27.8	
1	627	4.59	34.180	27.09	0.48	3.47	113	38.4	
1	884	4.10	34.305	27.25	0.31	3.47	133	41.3	
1	1406	3.13	34.463	27.47	0.44	3.48	163	40.1	

STATION 287-063										OBSERVED VALUES									
DATE 5/21/61		HR 16		LAT 47-01N		LONG 125-19W		SDG 1866		WEA 03									
SEC DI		BA 19		CL 6		AMT 6		DRY 11.4		WET 9.7		RELHU 84		VIS 7					
WVEL 7		DIR 18		SEA 3		DIR 18		SWL 1		DIR 30		WA 25.08							
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S								
P	2	0	12.54	28.859	21.76	6.32			0.49	9.04									
A	2	10	11.03	31.998	24.46	6.55			0.45	9.14									
A	2	19	9.66	32.345	24.96	6.62			0.33	4.98									
A	2	30	9.38	32.493	25.12	6.54			0.38	2.33									
	38																		
2	40	9.22	32.595	25.22	6.47														
2	59	8.64	32.671	25.37	6.02														
2	79	8.16	33.133	25.81	4.86														
2	99	7.90	33.530	26.16	3.99														
2	111	7.66	33.765	26.38	3.29														
2	132	7.40	33.882	26.50	2.82														
1	156	7.36	33.894	26.52	2.59														
1	176	7.07	33.928	26.59	2.42														
1	272	6.26			1.84														
1	463	5.11			0.88														
1	611	4.18	34.282	27.22	0.45														
1	953	3.43	34.430	27.41	0.37														
1	1550	2.40	34.549	27.60	0.95														

STATION 287-063 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.54		28.859		21.76	606.2	0.000	6.32	
10	11.03		31.998		24.46	348.5	0.048	6.55	
20	9.66		32.345		24.96	300.9	0.081	6.62	
30	9.38		32.493		25.12	285.8	0.110	6.54	
50	8.93	0.02	32.623	0.021	25.29	269.8	0.166	6.30	0.01
75	8.24	0.00	33.028	0.012	25.71	230.1	0.228	5.11	0.03
100	7.88	0.00	33.552	0.002	26.18	186.4	0.280	3.93	0.01
150	7.37	0.02	33.896	0.005	26.52	154.7	0.365	2.63	0.01
200	6.82	0.03	33.950	0.005	26.65	143.1	0.440	2.25	0.01
250	6.40	0.02	34.021	0.013	26.75	133.8	0.509	1.95	0.01
300	6.07	0.01	34.076	0.019	26.84	126.3	0.574	1.68	0.00
400	5.46	0.02	34.168	0.023	26.98	113.0	0.694	1.16	0.01
500	4.86	0.01	34.236	0.017	27.11	101.9	0.801	0.75	0.00
600	4.24	0.00	34.279	0.002	27.03	109.7	0.907	0.47	0.00
700	3.89	0.06	34.329	0.002	27.29	85.6	1.005	0.35	0.03
800	3.64	0.08	34.374	0.002	27.35	80.2	1.088	0.31	0.04
1000	3.34	---	34.446	---	27.43	73.0	1.241	0.38	---
1200	2.96	---	34.501	---	27.51	66.1	1.380	0.50	---
1500	2.47	---	34.546	---	27.59	58.9	1.567	0.87	---

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STATION 287-063A OBSERVED VALUES

DATE 5/21/61 HR 19 LAT 47-01N LONG 125-19W SDG WEA 02
 SECDI 14 BA 18 CL AMT DRY RELHU VIS
 WVEL 7 DIR 18 SEA DIR SWL DIR WA

DEPTH	PHOS.	SIL.	NITR.	CHL-A	PROD-1	PROD-S
0	0.40	20		0.45	8.26	64.32
6	0.41	21	0.0	0.41	8.79	41.24
19	0.74	8	1.2	0.31	5.68	7.06
38	1.00	15	5.2	0.42	3.97	0.68

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STATION 287-064 OBSERVED VALUES

DATE 5/22/61 HR 00 LAT 47-03N LONG 124-50W SDG 150 WEA 03
 SECDI BA 16 CL 6 AMT 7 DRY 12.2 WET 10.1 RELHU 75 VIS 7
 WVEL 7 DIR 20 SEA 2 DIR 20 SWL 1 DIR 30 WA 12

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	12.37	29.465	22.26	6.36				0.34	1.34	
	3	12.32	29.477	22.28	6.40						
P	6	12.38	29.466	22.26	6.40				0.33	1.26	
	10	12.33	29.483	22.28	6.38						
	15	10.90	31.757	24.29	6.59						
P	19	10.54	32.007	24.55	6.65				0.55	1.83	
	24	9.96	32.084	24.71	6.42						
	29	9.67	32.271	24.90	6.46						
A	38								0.47	0.56	
	39	8.91	32.377	25.10	5.60						
	59	8.67	32.738	25.42	5.03						
	78	8.10	33.474	26.08	3.63						
	98	7.87	33.654	26.26	2.92						
	122	6.90	33.946	26.62	1.94						
	145	6.67	33.966	26.67	1.79						

STATION 287-064 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	12.37		29.465		22.26	558.5	0.000	6.36	
10	12.33		29.483		22.28	556.6	0.056	6.38	
20	10.42	0.01	32.028	0.010	24.59	336.4	0.101	6.61	0.02
30	9.59	0.01	32.289	0.006	24.93	304.2	0.133	6.39	0.02
50	8.70	0.09	32.537	0.009	25.26	272.7	0.191	5.25	0.10
75	8.19	0.01	33.363	0.021	25.98	204.4	0.250	3.86	0.03
100	7.79	0.02	33.682	0.005	26.29	175.5	0.298	2.82	0.01

STATION 287-065 OBSERVED VALUES

DATE 5/22/61 HR 02 LAT. 47-17N LONG 124-35W SDG 77 WEA 03
 SECDI BA 17 CL 6 AMT 8 DRY 12.2 WET 10.5 RELHU 82 VIS 7
 WVEL 6 DIR 17 SEA 2 DIR 17 SWL 1 DIR 17 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	12.58	29.247	22.05	6.82				1.04	10.11	
P 1	3	12.52	29.288	22.09	6.81				1.02	8.90	
1	6	12.21	29.580	22.38	6.82						
P 1	10	10.68	31.171	23.88	6.71				0.66	5.99	
1	15	10.34	31.685	24.33	6.55						
P 1	20	9.91	31.846	24.53	6.16				0.86	4.62	
1	25	9.07	31.944	24.74	5.42						
1	30	8.72	32.207	25.00	5.03						
1	40	8.59	32.389	25.16	5.00						
1	60	8.13	33.440	26.05	3.08						

STATION 287-065 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.58		29.247		22.05	578.3	0.000	6.82	
10	10.68		31.171		23.88	403.9	0.050	6.71	
20	9.91		31.846		24.53	341.8	0.087	6.16	
30	8.72		32.207		25.00	297.3	0.119	5.03	
50	8.39	----	32.790	-----	25.51	248.8	0.173	4.35	----

STATION 287-066 OBSERVED VALUES

DATE 5/22/61 HR 04 LAT 46-54N LONG 124-16W SDG 45 WEA 02
 SECD1 BA 16 CL 6 AMT 8 DRY 12.8 WET 11.4 RELHU 85 VIS 7
 WVEL 3 DIR 14 SEA 1 DIR 14 SWL 1 DIR 23 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P 1	0	11.47	30.704	23.38	6.44				3.94	39.96	
A 1	3	11.46	30.704	23.38	6.47					37.13	
A 1	6	11.46	30.705	23.38	6.47				4.04	41.46	
A 1	7	11.09	31.068	23.73	6.24				3.43	25.86	
A 1	10	10.47	31.614	24.26	6.04						
A 1	15	10.05	31.974	24.61	6.01						
A 1	20	9.55	32.372	25.00	5.59						

STATION 287-066 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.47		30.704		23.38	451.4	0.000	6.44	
10	11.09		31.068		23.73	418.3	0.044	6.24	
20	10.05		31.974		24.61	334.5	0.082	6.01	

STATION 287-067 OBSERVED VALUES

DATE 5/22/61 HR 06 LAT 47-10N LONG 124-22W SDG 43 WEA 02
 SEC DI BA 15 CL 6 AMT 8 DRY 12.2 WET 10.8 REL HU 85 VIS 7
 WVEL 3 DIR 16 SEA 1 DIR 18 SWL 1 DIR 24 WA 01

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	12.77	28.348	21.32	6.60	0.36	12	0.0	0.78	5.86
A	1	3	12.37	29.060	21.94	6.61	0.47	9	0.0	0.59	3.71
	1	6	11.53	30.087	22.89	6.61	0.38	12	0.0		
	1	10	10.41	31.411	24.11	6.50	0.61	8	0.0		
A	1	15	10.31	31.728	24.37	6.44	0.70	9	0.0	1.17	5.70
	1	18									
	1	20	10.08	31.975	24.60	6.33	0.78	9	0.7		
	1	25	9.81	32.106	24.75	5.58	0.86	11	2.3		
	1	30	9.42	32.235	24.91	5.84	1.17	17	5.8		
A	1	35							1.14	7.72	

STATION 287-067 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.77		28.348		21.32	648.0	0.000	6.60	
10	10.41		31.411		24.11	381.8	0.052	6.50	
20	10.08		31.975		24.60	334.9	0.088	6.33	
30	9.42		32.235		24.91	305.6	0.120	5.84	

STATION 287-068 OBSERVED VALUES

DATE 5/22/61 HR 09 LAT 47-23N LONG 124-30W SDG 46 WEA 02
 SECD 1 BA 15 CL X AMT 9 DRY 11.9 WET 10.6 RELHU 87 VIS 7
 WVEL 4 DIR 12 SEA 1 DIR 17 SWL 1 DIR 24 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	12.23	30.029	22.72	7.12						
1	3	12.17	30.040	22.74	7.18						
1	6	10.72	31.123	23.83	7.10						
1	10	10.36	31.352	24.07	6.61						
1	15	9.91	31.593	24.33	6.06						
1	20	9.53	31.901	24.63	5.58						
1	25	9.30	32.169	24.88	5.61						
1	30	8.95	32.489	25.18	5.15						

STATION 287-068 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.23		30.029		22.72	514.3	0.000	7.12	
10	10.36		31.352		24.07	385.3	0.045	6.61	
20	9.53		31.901		24.63	331.9	0.081	5.58	
30	8.95		32.489		25.18	279.7	0.112	5.15	

STATION 287-069 OBSERVED VALUES

DATE 5/22/61 HR 11 LAT 47-18N LONG 124-42W SDG 113 WEA 02
 SECDI BA 13 CL AMT 9 DRY 11.8 WET 11.0 RELHU 94 VIS 7
 WVEL 3 DIR 15 SEA 1 DIR 17 SWL 1 DIR 24 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	12.21	29.933	22.65	6.96						
1	3	12.20	29.937	22.65	6.94						
1	6	10.68	31.205	23.90	7.01						
1	10	10.03	31.417	24.18	6.37						
1	15	9.52	31.545	24.36	5.80						
1	20	9.24	31.764	24.57	5.72						
1	25	9.04			5.29						
1	30	9.10	32.040	24.81	5.42						
1	40	8.82	32.430	25.16	5.48						
1	60	8.32	32.938	25.63	4.68						
1	80	8.02			3.64						
1	100	6.85	33.941	26.63	1.77						

STATION 287-069 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.21		29.933		22.65	521.1	0.000	6.96	
10	10.03		31.417		24.18	375.3	0.045	6.37	
20	9.24		31.764		24.57	337.7	0.081	5.72	
30	9.10		32.030		24.81	315.2	0.114	5.42	
50	8.55	0.01	32.707	0.015	25.42	258.0	0.171	5.17	0.04
75	8.13	0.03	33.316	-----	25.96	207.0	0.229	3.95	0.02
100	6.85		33.941		26.63	143.5	0.273	1.77	

STATION 287-070 OBSERVED VALUES

DATE 5/22/61 HR 15 LAT 47-19N LONG 125-04W SDG 969 WEA 52
 SECD1 BA 12 CL 6 AMT 8 DRY 10.0 WET 9.8 RELHU 98 VIS 6
 WVEL 4 DIR 15 SEA 1 DIR 15 SWL 1 DIR 23 WA 08.10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	11.70	30.889	23.48	6.36			0.26	3.63	24.84
A	1	10	10.89	31.820	24.34	6.56			0.34	3.15	
A	1	20	10.46	32.103	24.64	6.65			0.27	3.54	
1	21	9.52	32.435	25.05	6.56						
1	40	9.12	32.538	25.20	6.35						
A	42								0.33	2.03	
1	59	8.77	32.599	25.30	6.16						
1	79	8.60	32.925	25.58	5.28						
1	99	8.11	33.440	26.05	3.95						
1	120	7.79	33.677	26.29	3.38						
1	144	7.46	33.879	26.49	2.74						
1	173	7.07	33.908	26.57	2.06						
2	194	6.82	33.944	26.63	2.21						
2	291	5.76	34.025	26.83	1.36						
2	487	4.78	34.165	27.06	0.58						
2	737	4.00	34.299	27.25	0.36						
2	885	3.68	34.357	27.33	0.37						

STATION 287-071 OBSERVED VALUES

DATE 5/22/61 HR 19 LAT 47-19N LONG 125-43W SDG 1718 WEA 03
SECDI BA 10 CLC 8 AMT 8 DRY 12.2 WET 10.8 RELHU 87 VIS 7
WVEL 13 DIR 13 SEA 3 DIR 13 SWL 1 DIR 15 WA 35.00

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P A	2	0	11.42	32.059	24.44	6.45	0.60	7	0.1	0.25	6.12	33.12
	2	10	11.38	32.043	24.43	6.42	0.64	6	0.1	0.27	6.45	29.92
A	2	20	11.28	32.227	24.59	6.73	0.65	7	1.2	0.15	2.08	2.08
	2	26	9.94	32.482	25.02	6.66	0.83	10	1.9			
	2	30	9.35	32.573	25.19	6.62	0.87	9	2.0			
		40					1.00	10	4.0			
A		52					1.04	16	4.5	0.18	0.82	0.58
	2	60	8.91	32.611	25.29	6.30	1.11	13	4.9			
	2	80	8.72	33.049	25.66	5.01	1.69	24	16.2			
	2	100	8.34	33.449	26.03	3.75	1.77	25	23.6			
	2	123	7.55	33.706	26.34	3.46	2.07	38	22.2			
2	147	7.37	33.798	26.44	3.18	3.17	1.85	33	19.2			
1	165	7.24	33.808	26.47	3.17	2.72	1.99	41	23.3			
2	171	7.18	33.898	26.55	2.72		2.17	39	20.3			
1	249	6.36	33.951	26.70	1.86		2.34	51	23.2			
1	422	5.22	34.076	26.94	0.79		3.45	71	27.2			
1	449	4.32	34.245	27.17	0.50		3.10	111	32.2			
1	889	3.72	34.357	27.33	0.31		2.94	101	31.2			

STATION 287-071 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.42		32.059		24.44	350.4	0.000	6.45	
10	11.38		32.043		24.43	351.1	0.036	6.42	
20	11.28		32.227		24.59	336.0	0.070	6.73	
30	9.94		32.482		25.02	295.4	0.102	6.66	
50	9.05	0.03	32.579	0.025	25.24	274.9	0.159	6.54	0.03
75	8.76	0.01	32.923	0.014	25.55	245.5	0.224	5.38	0.03
100	8.34		33.449		26.03	200.7	0.279	3.75	
150	7.35	0.00	33.808	0.003	26.45	160.8	0.370	3.14	0.02
200	6.89	0.03	33.883	0.023	26.58	149.8	0.447	2.62	0.17
250	6.35	0.00	33.952	0.000	26.70	138.4	0.519	1.85	0.00
300	5.95	0.02	33.987	0.000	26.78	131.4	0.587	1.45	0.01
400	5.33	0.01	34.050	0.000	26.91	119.4	0.712	0.87	0.01
500	4.85	0.01	34.137	0.003	27.03	109.1	0.827	0.61	0.04
600	4.47	0.01	34.211	0.002	27.13	100.1	0.931	0.50	0.03
700	4.16	---	34.275	---	27.21	92.8	1.028	0.45	---
800	3.90	---	34.323	---	27.28	87.0	1.118	0.37	---

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STATION 287-072 OBSERVED VALUES

DATE 5/23/61 HR 00 LAT 47-32N LONG 125-28W SDG 1101 WEA 60
 SECDI BA 12 CL 8 AMT 8 DRY 11.2 WET 10.4 RELHU 94 VIS 7
 WVEL 8 DIR 17 SEA 3 DIR 17 SWL 1 DIR 14 WA 15.05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	11.42	32.013	24.40	6.57						
2	10	11.37	32.003	24.40	6.55						
2	20	11.28	32.034	24.44	6.58						
2	30	10.65	32.261	24.73	6.63						
2	40	9.75	32.534	25.09	6.66						
2	60	8.57	32.578	25.31	6.29						
2	80	8.38	33.160	25.80	4.67						
2	100	8.14	33.588	26.17	3.54						
2	123	7.71	33.766	26.37	3.09						
2	147	7.36	33.857	26.49	2.70						
2	171	7.18	33.903	26.55	2.56						
1	195	6.94	33.940	26.61	2.68						
1	294	6.14	34.009	26.77	1.76						
1	490	4.85	34.139	27.03	0.84						
1	740	4.04	34.286	27.24	0.43						

STATION 287-072 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	11.42		32.013		24.40	353.8	0.000	6.57	
10	11.37		32.003		24.40	353.9	0.036	6.55	
20	11.28		32.034		24.44	350.3	0.071	6.58	
30	10.65		32.261		24.73	323.2	0.105	6.63	
50	9.05	0.01	32.564	0.050	25.23	275.9	0.165	6.59	0.03
75	8.38	0.03	32.996	0.022	25.67	234.5	0.228	5.11	0.05
100	8.14		33.588		26.17	187.5	0.281	3.54	
150	7.33	0.00	33.864	0.001	26.50	156.5	0.367	2.67	0.00
200	6.94	0.01	33.939	0.006	26.61	146.3	0.443	2.37	0.01
250	6.51	0.01	33.985	0.008	26.71	138.0	0.514	2.04	0.01
300	6.09	0.00	34.013	0.000	26.78	131.2	0.581	1.72	0.00
400	5.38	0.01	34.081	0.000	26.92	118.5	0.706	1.16	0.03
500	4.80	---	34.145	---	27.04	107.9	0.819	0.81	---
600	4.38	---	34.206	---	27.14	99.4	0.923	0.55	---
700	4.11	---	34.264	---	27.21	92.9	1.019	0.44	---

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STATION 287-073 OBSERVED VALUES

DATE 5/23/61 HR 03 LAT 47-35N LONG 124-56W SDG 168 WEA 03
 SECDI BA 12 CL 6 AMT 8 DRY 11.7 WET 10.6 RELHU 87 VIS 7
 WVEL 6 DIR 16 SEA 2 DIR 16 SWL 1 DIR 16 WA 10

CAST DEPTH TEMP. SAL. SIGMA-T OXY. PHOS. SIL. NITR. CHL-A PROD-I PROD-S

1	0	11.59	31.426	23.91	6.62					
1	3	11.57	31.380	23.88	6.62					
1	6	11.57	31.390	23.89	6.63					
1	10	11.04	31.704	24.23	6.69					
1	15	10.44	31.934	24.51	6.66					
1	20	10.26	32.013	24.60	6.63					
1	25	9.78	32.244	24.86	6.52					
1	30	9.44	32.466	25.09	6.39					
1	40	9.18	32.545	25.19	6.25					
1	60	8.62	32.779	25.46	5.64					
1	80	8.02	33.475	26.10	3.93					
1	100	7.75	33.647	26.27	3.50					
1	125	7.38	33.819	26.46	2.83					
1	150	6.83	33.934	26.62	1.93					

STATION 287-073 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.59		31.426		23.91	400.1	0.000	6.62	
10	11.04		31.704		24.23	370.4	0.039	6.69	
20	10.26		32.013		24.60	335.0	0.074	6.63	
30	9.44		32.466		25.09	288.8	0.105	6.39	
50	8.91	0.00	32.627	0.015	25.30	269.1	0.161	6.04	0.03
75	8.16	0.01	33.304	0.031	25.94	208.4	0.221	4.35	0.07
100	7.75		33.647		26.27	177.6	0.269	3.50	
150	6.83		33.934		26.62	144.5	0.350	1.93	

STATION 287-074 OBSERVED VALUES

DATE 5/23/61 HR 06 LAT 47-35N LONG 124-35W SDG 45 WEA 02
 SECD1 BA 13 CL 8 AMT 8 DRY 11.1 WET 10.6 RELHU 94 VIS 7
 WVEL 9 DIR 16 SEA 2 DIR 16 SWL 1 DIR 16 WA 03

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	11.64	30.476	23.17	7.27	0.46	16	0.0	3.53	8.76
A	1	3	11.64	30.478	23.17	7.27	0.50	18	0.0	4.19	8.34
		4									
	1	6	11.64	30.477	23.17	7.30	0.46	18	0.0		
	1	10	11.64	30.477	23.17	7.28	0.52	17	0.0		
A	1	14							3.73	10.26	
	1	15	11.62	30.492	23.19	7.30	0.55	18	0.0		
	1	20	9.83	31.233	24.07	5.82	1.25	26	9.6		
	1	25	9.42	31.822	24.59	5.49	1.36	23	10.7		
A	1	27							0.99	1.09	
	1	30	9.44	32.128	24.83	5.35	1.35	21	9.1		

STATION 287-074 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	11.64		30.476		23.17	471.1	0.000	7.27	
10	11.64		30.477		23.17	471.2	0.048	7.28	
20	9.83		31.233		24.07	386.0	0.090	5.82	
30	9.44		32.128		24.83	313.8	0.125	5.35	

STATION 287-075 OBSERVED VALUES

DATE 5/23/61 HR 08 LAT 47-47N LONG 124-35W SDG 27 WEA 02
 SECD1 BA 12 CL 8 AMT 8 DRY 11.1 WET 10.0 RELHU 87 VIS 7
 WVEL 7 DIR 12 SEA 2 DIR 12 SWL 1 DIR 16 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	11.28	30.563	23.30	7.28						
1	3	11.27	30.552	23.29	7.29						
1	6	11.28	30.553	23.29	7.31						
1	10	11.28	30.552	23.29	7.30						
1	15	10.98	30.767	23.51	6.90						

STATION 287-075 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.28		30.563		23.30	458.6	0.000	7.28	
10	11.28		30.552		23.29	459.6	0.046	7.30	

STATION 287-076 OBSERVED VALUES

DATE 5/23/61 HR 09 LAT 47-47N LONG 124-53W SDG 82 WEA 60
 SECD1 BA 12 CL X AMT 9 DRY 10.6 WET 9.7 RELHU 94 VIS 7
 WVEL 5 DIR 22 SEA 2 DIR SWL 1 DIR 36 WA 08

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	11.40	31.284	23.84	6.65	0.51	11	0.0			
1	3	11.42	31.287	23.84	6.65	0.53	10	0.2			
1	6	11.41	31.295	23.85	6.68	0.53	11	0.1			
1	10	11.41	31.301	23.85	6.65	0.52	11	0.2			
1	15	11.10	31.584	24.12	6.68	0.56	7	0.4			
1	20	10.54	31.904	24.47	6.53	0.63	8	0.8			
1	25	10.17	32.213	24.77	7.80	0.71	8	1.6			
1	30	9.65	32.368	24.98	6.46	0.89	8	3.2			
1	40	8.88	32.543	25.24	6.10	1.05	11	5.6			
1	59	8.33	32.881	25.58	4.73	1.45	19	10.9			
1	79	7.83	33.504	26.15	3.35	1.89	26	16.7			

STATION 287-076 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.40		31.284		23.84	407.3	0.000	6.65	
10	11.41		31.301		23.85	406.4	0.041	6.65	
20	10.54		31.904		24.47	347.6	0.079	6.53	
30	9.65		32.368		24.98	299.3	0.111	6.46	
50	8.51	0.05	32.705	0.010	25.42	257.6	0.167	5.43	0.04
75	7.92	-.00	33.357	-.000	26.02	201.1	0.224	3.62	-.00

STATION 287-077 OBSERVED VALUES														
DATE	5/23/61	HR	14	LAT	47-54N	LONG	125-16W	SDG	348	WEA	03			
SECDI	BA	12	CL	8	AMT	4	DRY	10.3	WET	7.8	RELHU	70	VIS	7
WVEL	2	DIR	22	SEA	1	DIR	22	SWL	1	DIR	31	WA	07, 02	
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
2	0	11.22	31.768	24.25	6.59									
2	3	11.21	31.766	24.25	6.59									
2	6	11.22	31.781	24.26	6.58									
2	10	10.97	31.812	24.32	6.57									
2	15	9.42	32.270	24.94	6.12									
2	20	9.60	32.466	25.06	6.57									
2	25	9.40	32.546	25.16	6.61									
2	30	9.35	32.556	25.17	6.64									
2	40	8.86	32.563	25.26	6.64									
2	60	8.33	32.615	25.38	6.41									
2	80	8.09	33.238	25.90	4.65									
2	100	7.71	33.711	26.33	3.42									
1	123	7.58	33.794	26.41	3.07									
1	148	7.28	33.879	26.52	2.73									
1	172	7.02	33.919	26.59	2.50									
1	196	6.91	33.953	26.63	2.58									
1	294	5.80	34.044	26.84	1.43									

STATION 287-077 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.22		31.768		24.25	368.5	0.000	6.59	
10	10.97		31.812		24.32	361.3	0.037	6.57	
20	9.60		32.466		25.06	291.0	0.070	6.57	
30	9.35		32.556		25.17	280.7	0.098	6.64	
50	8.54	0.01	32.550	0.022	25.29	269.5	0.153	6.64	0.05
75	8.14	0.01	33.063	0.023	25.75	226.1	0.215	5.14	0.06
100	7.71		33.711		26.33	172.2	0.265	3.42	
150	7.25	0.00	33.883	0.000	26.53	154.0	0.347	2.70	0.00
200	6.89	---	33.958	---	26.64	144.2	0.421	2.58	---
250	6.43	---	34.013	---	26.74	134.9	0.491	2.24	---

STATION 287-77A OBSERVED VALUES

[illegible]

STATION 287-078 OBSERVED VALUES

[illegible]

STATION 287-078 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.10		31.193		23.82	409.0	0.000	6.65	
10	11.07		31.229		23.85	406.0	0.041	6.62	
20	10.25		31.274		24.03	389.6	0.081	6.12	
30	8.96		32.492		25.18	279.6	0.114	4.56	

STATION 287-079 OBSERVED VALUES

DATE 5/23/61 HR 19 LAT 48-09N LONG 125-00W SDG 139 WEA 52
 SECDI BA 14 CL 8 AMT 8 DRY 9.7 WET 8.6 RELHU 86 VIS 7
 WVEL 15 DIR 18 SEA 2 DIR 19 SWL 1 DIR 18 WA 08

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1										
	0	11.64	30.753	23.38	6.73	0.49	13	0.0	1.48		
A	3	11.63	30.754	23.39	6.72	0.57	16	0.0	1.35		
	4										
	6	11.64	30.753	23.38	6.74	0.55	15	0.0			
	10	11.62	30.769	23.40	6.72	0.61	16	0.0			
A	12										
	15	10.12	31.270	24.05	6.74	0.90	16	4.3	1.28		
	20	9.39	31.348	24.23	6.12	1.04	20	6.6	0.45		
A	24										
	25	8.84	31.444	24.39	5.95	1.16	23	8.4			
	30	8.73	31.727	24.62	5.43	1.51	29	13.7			
	40	8.63	31.957	24.82	4.98	1.80	32	17.3			
	59	8.48	32.520	25.28	5.23	1.60	25	13.7			
	79	8.10	32.957	25.68	5.20	1.70	24	15.5			
	99	7.63	33.467	26.15	3.17	2.12	33	19.1			

STATION 287-079 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.64		30.753		23.38	450.6	0.000	6.73	
10	11.62		30.769		23.40	449.3	0.045	6.72	
20	9.39		31.348		24.23	370.8	0.087	6.12	
30	8.73		31.727		24.62	333.1	0.122	5.43	
50	8.56	0.01	32.252	0.013	25.06	291.9	0.184	5.04	0.07
75	8.19	0.00	32.873	0.006	25.60	240.8	0.251	5.30	0.05

STATION 287-080 OBSERVED VALUES

DATE 5/23/61 HR 21 LAT 48-17N LONG 125-15W SDG 192 WEA 60
 SECD1 BA 15 CL 8 AMT 8 DRY 10.2 WET 8.9 RELHU 87 VIS 7
 WVEL 15 DIR 16 SEA 2 DIR 16 SWL 1 DIR 18 WA 18

	CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	10.31	30.741	23.60	6.33				1.32		
	1	3	10.33	30.744	23.60	6.56				2.16		
	1	6	10.31	30.744	23.61	6.47						
A	1	10	10.17			6.35				1.41		
	1	12										
	1	14	9.89	31.256	24.07	6.09						
	1	19	9.65	31.499	24.30	5.76						
A	1	23	8.68	31.756	24.65	4.49				0.38		
	1	24	8.56	31.929	24.81	4.42						
	1	29										
	1	38	8.09	32.224	25.11	3.95						
	1	57	7.96	32.726	25.52	3.67						
	1	76	7.57	33.406	26.11	2.89						
	1	95	7.09	33.765	26.46	2.42						
	1	119	6.93	33.862	26.55	2.23						
	1	143	6.80	33.893	26.60	2.16						
	1	166	6.44	33.929	26.67	1.87						

STATION 287-080 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.31		30.741		23.60	429.7	0.000	6.33	
10	10.17		30.963	0.037	23.80	411.2	0.043	6.35	
20	9.45	0.04	31.553	0.003	24.38	356.5	0.081	5.50	0.06
30	8.51	0.01	31.963	0.000	24.84	312.3	0.114	4.37	0.01
50	7.95	0.06	32.540	0.013	25.37	261.9	0.172	3.75	0.06
75	7.59	0.00	33.372	0.004	26.08	195.5	0.229	2.93	0.01
100	7.03	0.01	33.804	0.009	26.49	156.1	0.273	2.36	0.01
150	6.71	---	33.903	---	26.62	145.3	0.348	2.09	---

STATION 287-081 OBSERVED VALUES

DATE 5/24/61 HR 01 LAT 48-31N LONG 124-42W SDG 236 WEA 03
 SEC DI BA 17 CL 6 AMT 5 DRY 11.7 WET 9.5 RELHU 75 VIS 7
 WVEL 7 DIR 20 SEA 2 DIR 20 SWL 1 DIR 21 WA 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	9.80	31.041	23.92	5.59	2.09	47	21.3	2.40		
	3	9.78	31.043	23.93	6.00	2.11	43	21.6	2.53		
P	1	9.68	31.047	23.94	5.91	2.26	47	21.6			
	10	9.29	31.101	24.05	5.41	2.04	38	18.9	1.76		
P	1	9.02	31.149	24.13	5.22	2.00	41	21.2			
	20	8.91	31.205	24.19	5.07	2.19	42	21.9	0.84		
P	1	8.84	31.263	24.24	4.92	2.32	49	30.4			
	30	8.84	31.362	24.32	4.83	2.11	39	21.3			
	39	8.69	31.580	24.51	4.65	2.09	38	21.9			
	59	8.16	32.073	24.98	3.95	2.72	44	26.3			
	79	7.90	32.654	25.47	3.47	2.63	55	30.2			
	99	7.79	33.405	26.07	3.33	2.76	60	28.0			
	123	7.16	33.723	26.41	2.32	2.91	60	29.8			
	148	6.84	33.849	26.56	2.12						
	172		33.924		1.96						

STATION 287-081 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.80		31.041		23.92	399.5	0.000	5.59	
10	9.29		31.101		24.05	387.5	0.040	5.41	
20	8.91		31.205		24.19	374.3	0.078	5.07	
30	8.84		31.362		24.32	361.8	0.115	4.83	
50	8.40	0.02	31.845	0.003	24.76	319.9	0.183	4.28	0.03
75	7.94	0.00	32.527	0.002	25.37	263.0	0.256	3.54	0.00
100	7.55	0.02	33.240	0.033	25.99	204.3	0.314	2.87	0.05
150			33.857	---				2.11	---

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STATION 287-082 OBSERVED VALUES													
DATE	5/24/61	HR	05	LAT	48-18N	LONG	124-03W	SDG	188	WEA	01		
SECD	1	BA	19	CL	8	AMT	3	DRY	10.0	WET	8.6	RELHU	84
WVEL		DIR	0	SEA	0	DIR	00	SWL	0	DIR	00	WA	00
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	9.74	30.640	23.62	5.64				1.12				
A	2								1.16				
	3	9.71	30.656	23.64	5.63								
	6	9.66	30.845	23.79	5.50								
	10	9.48	30.904	23.87	5.39								
	15	8.90	31.198	24.18	4.85								
	20	8.86	31.242	24.22	4.78								
	25	8.92	31.362	24.31	4.87								
	30	8.85	31.356	24.31	4.76								
	40	8.56	31.638	24.58	4.46								
	60	8.14	32.239	25.11	3.86								
	80	7.64	32.899	25.70	3.27								
	100	7.37	33.440	26.16	2.71								
	125	7.01	33.806	26.50	2.24								
	150	6.72	33.915	26.62	2.04								
	175	6.71	33.917	26.63	2.05								

STATION 287-082 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.74		30.640		23.62	428.3	0.000	5.64	
10	9.48		30.904		23.87	404.9	0.042	5.39	
20	8.86		31.242		24.22	370.9	0.081	4.78	
30	8.85		31.356		24.31	362.4	0.118	4.76	
50	8.34	0.01	31.932	0.000	24.84	312.6	0.185	4.16	0.00
175	7.76	0.01	32.737	0.006	25.56	245.0	0.255	3.42	0.00
100	7.37		33.440		26.16	187.7	0.309	2.71	
150	6.72		33.915		26.62	144.5	0.392	2.04	

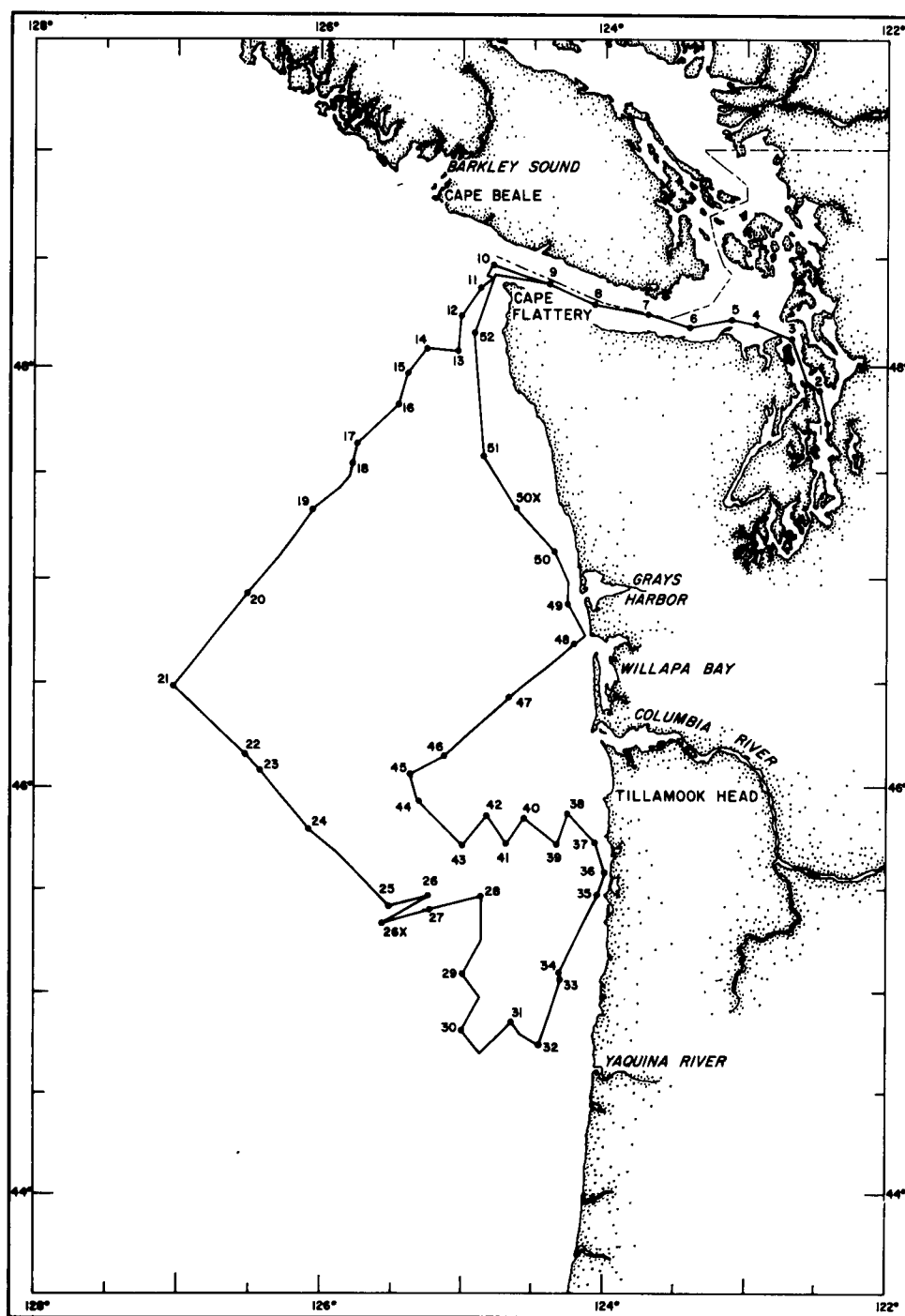


Fig. 6. Station locations Brown Bear Cruise No. 288, 9-19 June, 1961.

STATION 288-001 OBSERVED VALUES

DATE 6/09/61 HR 18 LAT 47-45N LONG 122-25W SDG 274 WEA 02
 SECDI 10 BA 36 CL 4 AMT 8 DRY 13.9 WET 11.4 RELHU 75 VIS 7
 WVEL 8 DIR 17 SEA 5 DIR 17 SWL DIR WA 30, 13

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
C	2	0	10.88	28.588	21.84	6.04	1.10	22	11.4	0.43	5.82
A	4	4	10.86	28.561	21.82	6.08	1.78	35	0.50	1.02	3.16
	5										
	10	10.84	28.566	21.83	6.03						
A	14					1.89	42	8.8	0.40	0.57	0.60
	19	10.37	28.713	22.02	5.82						
A	28					1.80	42	17.6	0.29	0.44	0.12
	29	9.98	29.025	22.33	5.49						
2	49	9.82	29.360	22.61	5.60						
2	73	9.80	29.396	22.64	5.15						
2	97	9.82	29.443	22.68	5.11						
1	130	9.49	29.531	22.79	4.97						
1	173	9.41	29.569	22.84	4.92						
1	210	9.41	29.581	22.85	4.92						

STATION 288-001 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	10.88		28.588		21.84	598.4	0.000	6.04	
10	10.84		28.566		21.83	599.5	0.060	6.03	
20	10.32	0.00	28.743	0.004	22.05	578.4	0.119	5.78	0.01
30	9.96	0.01	29.040	0.001	22.35	550.2	0.176	5.49	0.01
50	9.82	0.00	29.365	0.003	22.62	524.9	0.283	5.58	0.01
75	9.81	0.00	29.399	0.000	22.64	522.5	0.414	5.14	0.01
100	9.79	0.01	29.451	0.001	22.69	518.9	0.544	5.10	0.00
150	9.44	0.00	29.554	0.001	22.82	506.6	0.801	4.94	0.00
200	9.40	---	29.570	---	22.85	504.9	1.054	4.92	---

M M M

STATION 288-002 OBSERVED VALUES

DATE 6/09/61 HR 22 LAT 47-54N LONG 122-29W SDG 197 WEA 46
 SECDI 8 BA 21 CL 1 AMT 8 DRY 14.1 WET 11.8 RELHU 77 VIS
 WVEL 10 DIR 18 SEA DIR 4 SWL DIR WA 20, 23

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	11.84	26.931	20.40	6.09						
2	5	11.86	26.880	20.35	5.85						
2	9	10.99	27.947	21.33	5.82						
2	18	10.41	29.029	22.26	5.41						
2	28	10.38	29.072	22.30	5.41						
2	46	10.28	29.338	22.52	5.25						
2	122	10.12	29.507	22.68	5.04						
1	150	10.12	29.586	22.74	5.05						
1	179	10.08	29.672	22.81	5.03						

STATION 288-002 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.84	0.02	26.931	0.014	20.40	736.9	0.000	6.09	
10	10.87	0.02	28.137	0.035	21.49	631.8	0.069	5.78	0.01
20	10.38	0.02	29.083	0.005	22.31	554.0	0.128	5.39	0.01
30	10.37	0.00	29.098	0.005	22.32	553.0	0.184	5.40	0.00
50	10.27	0.00	29.366	0.013	22.54	531.8	0.292	5.23	0.01
75	10.20	0.02	29.491	0.062	22.65	521.8	0.424	5.13	0.03
100	10.16	0.02	29.536	0.054	22.69	518.2	0.554	5.07	0.03
150	10.12		29.586		22.74	514.7	0.812	5.05	

STATION 288-003 OBSERVED VALUES

DATE 6/10/61 HR 01 LAT 48-09N LONG 122-41W SDG 35 WEA 02
 SECID 7 BA 20 CL 4 AMT 7 DRY 12.7 WET 10.4 RELHU 76 VIS
 WVEL 5 DIR 27 SEA 0 DIR 27 SWL DIR WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	10.86	28.911	22.09	5.64						
2	5	10.42	29.432	22.57	5.34						
2	10	10.27	29.634	22.75	5.21						
2	20	10.20	29.659	22.78	5.25						
2	30	10.24	29.666	22.78	5.24						

STATION 288-003 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.86		28.911		22.09	574.1	0.000	5.64	
10	10.27		29.634		22.75	511.3	0.055	5.21	
20	10.20		29.659		22.78	508.5	0.106	5.25	
30	10.24		29.666		22.78	508.8	0.157	5.24	

STATION 288-004 OBSERVED VALUES

DATE 6/10/61 HR 03 LAT 48-13N LONG 122-56W SDG 91 WEA 02
 SECDI BA 17 CL 4 AMT 7 DRY 11.7 WET 10.5 RELHU 87 VIS 7
 WVEL 3 DIR 27 SEA 0 DIR SWL WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.79	30.078	23.17	4.93						
1	5	9.78	30.073	23.17	4.92						
1	10	9.72	30.279	23.34	4.86						
1	20	9.70	30.505	23.52	4.75						
1	30	9.16	31.041	24.02	4.26						
1	50	8.97	31.389	24.32	4.20						
2	70	8.49	31.990	24.86	3.68						
2	90	8.22	32.380	25.21	3.39						

STATION 288-004 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.79		30.078		23.17	470.8	0.000	4.93	
10	9.72		30.279		23.34	455.0	0.047	4.86	
20	9.70		30.505		23.52	438.1	0.091	4.75	
30	9.16		31.041		24.02	390.3	0.133	4.26	
50	8.97	---	31.389	---	24.32	362.0	0.208	4.20	---
75	8.40	---	32.107	---	24.97	300.8	0.291	3.59	---

STATION 288-005 OBSERVED VALUES

DATE 6/10/61 HR 05 LAT 48-14N LONG 123-07W SDG 282 WEA 02
 SEC DI 18 CL 4 AMT 7 DRY 11.6 WET 9.9 REL HU 81 VIS 7
 WVEL 3 DIR 23 SEA 1 DIR 23 SWL WA 07

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.20	30.032	23.07	5.29						
1	5	10.18	30.034	23.08	5.29						
1	10	10.02	30.079	23.14	5.13						
1	20	9.69	30.262	23.33	4.85						
1	30	9.62	30.320	23.39	4.77						
1	50	9.13	30.916	23.93	4.36						
1	74	8.57	31.881	24.77	3.73						
1	99	8.28	32.328	25.16	3.44						
1	129	7.91	32.714	25.52	3.15						
1	159	7.84	32.781	25.58	2.99						

STATION 288-005 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.20		30.032		23.07	480.5	0.000	5.29	
10	10.02		30.079		23.14	474.4	0.048	5.13	
20	9.69		30.262		23.33	455.9	0.095	4.85	
30	9.62		30.310		23.39	450.7	0.140	4.77	
50	9.13	0.00	30.916		23.93	399.5	0.225	4.36	0.00
75	8.56	0.00	31.905	0.003	24.79	318.0	0.315	3.71	0.00
100	8.27	0.00	32.345	0.001	25.17	281.6	0.390	3.43	0.00
150	7.83	---	32.794	---	25.59	242.8	0.521	3.02	---

STATION 288-006 OBSERVED VALUES

DATE 6/10/61 HR 05 LAT 48-12N LONG 123-24W SDG 137 WEA
 SEC DI BA 17 CL 9 AMT DRY 10.7 WET 10.0 RELHU 92 VIS 7
 WVEL 2 DIR 28 SEA 1 DIR 28 SWL 1 DIR WA 01

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	9.94	30.303	23.32	5.00						
1	5	9.61	30.526	23.55	4.86						
1	10	9.48	30.672	23.68	4.72						
1	20	9.04	31.201	24.16	4.35						
1	30	8.82	31.513	24.44	4.09						
1	50	8.54	31.857	24.75	3.79						
1	75	7.84	32.979	25.73	3.07						
1	100	7.78	33.134	25.86	2.90						
1	125	7.58	33.281	26.01	2.83						

STATION 288-006 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.94		30.303		23.32	456.4	0.000	5.00	
10	9.48		30.672		23.68	422.2	0.044	4.72	
20	9.04		31.201		24.16	376.5	0.084	4.35	
30	8.82		31.513		24.44	350.3	0.121	4.09	
50	8.54		31.857		24.75	321.0	0.188	3.79	
75	7.84		32.979		25.73	228.1	0.256	3.07	
100	7.78		33.134		25.86	216.1	0.312	2.90	

STATION 288-007 OBSERVED VALUES

DATE 6/10/61 HR 08 LAT 48-16N LONG 123-42W SDG 181 WEA 02
 SECDI BA 18 CL AMT DRY 11.7 WET 11.0 RELHU 81 VIS
 WVEL 6 DIR 27 SEA 0 DIR SWL 1 DIR 24 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.30	30.139	23.14	5.34						
1	5	9.78	30.333	23.37	4.98						
1	10	9.72	30.727	23.69	4.93						
1	20	9.48	31.046	23.98	4.76						
1	30	9.27	31.275	24.19	4.60						
1	50	8.47	32.086	24.94	3.79						
1	75	7.86	32.796	25.59	3.14						
1	100	7.60	33.231	25.97	2.81						
1	140	6.87	33.822	26.53	2.07						
1	180	6.87	33.833	26.54	2.05						

STATION 288-007 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.30		30.139		23.14	474.1	0.000	5.34	
10	9.72		30.727		23.69	421.7	0.045	4.93	
20	9.48		31.046		23.98	394.6	0.086	4.76	
30	9.27		31.275		24.19	374.6	0.125	4.60	
50	8.47		32.086		24.94	303.0	0.192	3.79	
75	7.86		32.796		25.59	242.0	0.260	3.14	
100	7.60		33.231		25.97	206.4	0.316	2.81	
150	6.80	---	33.879	---	26.58	148.2	0.405	2.00	---

STATION 288-008

DATE 6/10/61 HR 12 LAT 48-18N LONG 124-04W SDG 1920 WEA 02
SECDI 10 BA 17 CL AMT 6 DRY 10.6 WET 9.4 RELHU 86 VIS 8
WVEL 3 DIR 04 SEA 1 DIR 04 SWL 2 DIR 04 WA 05

	CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	9.86	30.502	23.49	5.19				0.47	1.65	20.78
A	1	4								0.37	1.71	
		5	9.85	30.549	23.53	5.10						
	1	10	9.52	30.767	23.75	4.75				0.22	1.02	
A		14										
	1	20	9.08	31.266	24.21	4.45				0.21	0.99	
A		27										
	1	30	9.04	31.301	24.24	4.37						
	1	50	8.92	31.477	24.40	4.26						
	1	75	8.47	32.112	24.96	3.82						
	1	100	7.71	33.060	25.82	2.99						
	1	139	7.00	33.772	26.47	2.23						
	1	179		33.864		2.06						

STATION 288-008

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	9.86		30.502		23.49	440.4	0.000	5.19	
10	9.52		30.767		23.75	415.7	0.043	4.75	
20	9.08		31.266		24.21	372.3	0.083	4.45	
30	9.04		31.301		24.24	369.2	0.120	4.37	
50	8.92		31.477		24.40	354.7	0.192	4.26	
75	8.47		32.112		24.96	301.4	0.274	3.82	
100	7.71		33.060		25.82	220.6	0.339	2.99	
150			33.862	--- --				2.12	---

STATION 288-009 OBSERVED VALUES

DATE 6/10/61 HR 14 LAT 48-24N LONG 124-23W SDG 247 WEA 03
 SECD1 7 BA 14 CL 3 AMT 8 DRY 10.6 WET 10.1 RELHU 94 VIS 9
 WVEL DIR 00 SEA 0 DIR 00 SWL 1 DIR 27 WA 00

CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.70	31.293	23.97	6.47						
1	5	10.58	31.330	24.02	6.33						
1	10	10.35	31.380	24.09	5.96						
1	20	9.82	31.484	24.26	5.24						
1	30	9.68	31.520	24.31	5.11						
1	50	9.26	32.157	24.88	4.48						
1	75	7.94	32.915	25.67	3.21						
1	100	7.53	33.506	26.19	2.70						
1	150	7.01	33.826	26.51	2.24						
1	200	6.86	33.877	26.58	2.06						

STATION 288-009 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.70		31.293		23.97	395.0	0.000	6.47	
10	10.35		31.370		24.09	383.1	0.039	5.96	
20	9.82		31.484		24.26	367.2	0.077	5.24	
30	9.68		31.510		24.31	362.6	0.113	5.11	
50	9.26		32.157		24.88	309.3	0.181	4.48	
75	7.94		32.915		25.67	234.2	0.249	3.21	
100	7.53		33.506		26.19	185.0	0.301	2.70	
150	7.01		33.826		26.51	154.9	0.386	2.24	
200	6.86		33.877		26.58	149.9	0.462	2.06	

STATION 288-010 OBSERVED VALUES

DATE 6/10/61 HR 16 LAT 48-29N LONG 124-47W SDG 282 WEA 03
 SEC'D 10 BA 13 CL 3 AMT 8 DRY 11.1 WET 10.6 RELHU 94 VIS 8
 WVEL 4 DIR 27 SEA 5 DIR 27 SWL 1 DIR 27 WA 03.03

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	11.66	31.210	23.73	4.85	1.22	30	10.8			
1	5	11.60	31.217	23.75	6.09	1.18	29				
1	10	11.14	31.249	23.86	5.88	1.00	33				
1	20	9.32	31.553	24.40	4.88	2.03	46	24.5			
1	30	9.09	31.649	24.51	4.21	2.34	46	24.7			
1	50	8.96	31.806	24.65	4.36	2.44	48	25.6			
2	75	8.18	32.734	25.49	3.53						
2	100	7.88	33.386	26.05	3.16						
2	150	7.16	33.778	26.46	2.43		53				
2	200	6.95	33.870	26.56	2.16		54	32.3			
2	250	6.54	33.952	26.68	1.93		62	34.5			

STATION 288-010 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.66		31.200		23.73	417.2	0.000	4.85	
10	11.14		31.249		23.86	405.7	0.042	5.88	
20	9.32		31.553		24.40	354.5	0.080	4.88	
30	9.09		31.649		24.51	344.1	0.115	4.21	
50	8.96		31.806		24.65	330.9	0.182	4.36	
75	8.18		32.734		25.49	251.1	0.255	3.53	
100	7.88		33.386		26.05	198.8	0.311	3.16	
150	7.16		33.778		26.46	160.5	0.401	2.43	
200	6.95		33.860		26.56	151.6	0.479	2.16	
250	6.54		33.952		26.68	140.8	0.552	1.93	

STATION 288-011 OBSERVED VALUES													
DATE	6/10/61	HR	18	LAT	48-23N	LONG	124-52W	SDG	320	WEA			
SECDI	8	BA	13	CL	AMT	DRY	13.3	WET	10.8	RELHU	73	VIS	
WVEL	6	DIR	15	SEA	2	DIR	15	SWL	1	DIR	20	WA	18.20
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
C	1	0	13.26	30.184	22.64	6.44	0.74	14	0.4	1.37	3.46	28.28	
A	1	3	13.20	30.215	22.86	6.41	0.74	14	0.0	1.49	3.61	18.04	
C	1	19	13.22	30.453	22.67	6.46	0.72	10	1.2	1.16	4.57	2.74	
A	1	19	12.89	30.800	23.19	6.26	0.73	11	1.1	1.42	5.03	0.32	
	1	29	12.73	30.815	23.23	6.25							
	1	48	9.18	31.325	24.24	5.92							
	1	71	7.68	33.586	26.23	3.08							
	1	95	7.42	33.759	26.40	2.61							
	1	143	7.15	33.847	26.51	2.35							
	1	190	7.03	33.889	26.56	2.22							
	2	238	6.62	33.930	26.65	1.88							
	2	282		33.957	1.78								

STATION 288-011 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.26		30.184		22.64	521.5	0.000	6.44	
10	13.22	0.02	30.453		22.86	501.2	0.052	6.46	
20	12.90	0.05	30.806	0.008	23.19	469.4	0.100	6.26	0.01
30	12.57	0.05	30.819	0.005	23.26	462.8	0.147	6.26	0.01
50	8.96	0.02	31.527	0.051	24.43	351.7	0.228	5.68	0.07
75	7.59	0.03	33.695	0.050	26.33	171.3	0.294	2.91	0.05
100	7.38	0.00	33.777	0.005	26.42	162.8	0.335	2.56	0.01
150	7.14	0.01	33.855	0.001	26.52	154.5	0.415	2.33	0.01
M									
200	6.97	0.01	33.898	0.000	26.58	149.8	0.491	2.15	0.01
250			33.938	0.000				1.62	0.01

STATION 288-012 OBSERVED VALUES

DATE 6/11/61 HR 04 LAT 48-16N LONG 125-01W SDG 246 WEA 63
 SECD1 BA 14 CL AMT 9 DRY 11.8 WET 11.7 RELHU 99 VIS
 WVEL 5 DIR 18 SEA 3 DIR 27 SWL 2 DIR WA 15, 05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
2	0	12.16	30.845	23.36	6.62						
2	5	12.15	30.848	23.37	6.65						
2	10	12.16	30.854	23.37	6.63						
2	20	11.65	31.050	23.61	6.48						
2	30	9.28	32.155	24.87	4.82						
2	50	8.11	32.806	25.56	3.44						
2	75	7.49	33.376	26.09	2.67						
1	97	7.43	33.468	26.18	2.51						
1	145	6.87	33.842	26.55	2.06						
1	193	6.82	33.861	26.57	1.90						
1	232	6.33	33.982	26.73	1.87						

STATION 288-012 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	12.16		30.845		23.36	452.9	0.000	6.62	
10	12.16		30.854		23.37	452.4	0.046	6.63	
20	11.65		31.040		23.61	429.3	0.090	6.48	
30	9.28		32.155		24.87	309.4	0.127	4.82	
50	8.11		32.806		25.56	244.3	0.182	3.44	
75	7.49		33.376		26.09	193.7	0.237	2.67	
M 100	7.40	0.01	33.493	0.006	26.20	184.1	0.284	2.48	0.00
150	6.87	0.02	33.849	0.008	26.55	151.3	0.368	2.03	0.00
200	6.76	0.02	33.876	0.008	26.59	148.7	0.443	1.89	0.00

STATION 288-013 OBSERVED VALUES

DATE 6/11/61 HR 07 LAT 48-05N LONG 125-02W SDG 298 WEA 02
 SECD1 BA 18 CL 3 AMT 4 DRY 11.7 WET 11.7 RELHU 99 VIS
 WVEL 5 DIR 30 SEA 1 DIR 30 SWL WA 10.09.05

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
3	0	12.22	30.987	23.46	6.34						
3	5	12.18	30.992	23.47	6.34						
3	10	12.20	30.996	23.47	6.29						
3	20	10.02	31.564	24.29	5.15						
3	30	9.68	31.810	24.54	4.97						
3	50	8.39	32.532	25.30	3.68						
3	75	8.05	33.129	25.83	4.32						
3	100	7.44	33.687	26.35	2.61						
1	148	7.16	33.863	26.52	2.26						
1	197	7.03	33.906	26.57	2.12						
1	247	6.70	33.964	26.67	1.90						
2	296	6.55	33.979	26.70	1.89						

STATION 288-013 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.22		30.987		23.46	443.5	0.000	6.34	
10	12.20		30.996		23.47	442.6	0.045	6.29	
20	10.02		31.564		24.29	364.4	0.085	5.15	
30	9.68		31.800		24.54	341.1	0.120	4.97	
50	8.39		32.532		25.30	268.7	0.181	3.68	
75	8.05		33.139		25.83	219.1	0.242	4.32	
100	7.44		33.687		26.35	170.3	0.291	2.61	0.00
150	7.16	0.00	33.866	0.001	26.53	153.9	0.372	2.25	0.00
M									
200	7.01	0.00	33.900	0.001	26.58	149.4	0.448	2.10	0.00
M									
250	6.69	-0.00	33.966	-0.000	26.67	141.7	0.521	1.89	-0.00

STATION 288-014 OBSERVED VALUES

DATE	6/11/61	HR	07	LAT	48-07N	LONG	125-15W	SDG	325	WEA			
SECD1	BA	CL	6	AMT	7	DRY	12.2	WET	12.2	RELHU	99	VIS	1
WVEL	DIR	SEA	1	DIR	SWL	DIR	WA	05	02				
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
2	0	12.75	31.291	23.60	6.10								
2	5	12.76	31.291	23.59	6.14								
2	10	12.76	31.299	23.60	6.16								
2	20	9.26	31.465	24.34	4.84								
2	30	8.94	31.709	24.58	4.57								
2	50	8.86	32.511	25.21	5.88								
2	75	8.18	32.906	25.63	4.37								
1	100	7.92	33.482	26.12	3.64								
1	149	7.17	33.819	26.49	2.23								
1	199	6.94	33.881	26.57	2.00								
1	249	6.40	33.971	26.71	1.72								

STATION 288-014 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL.	GEOPOT.	OXY.	E(O)
0	12.75		31.291		23.60	430.6	0.000	6.10	
10	12.76		31.299		23.60	430.4	0.044	6.16	
20	9.26		31.465		24.34	360.2	0.083	4.84	
30	8.94		31.709		24.58	337.5	0.118	4.57	
50	8.86		32.511		25.21	277.0	0.179	5.88	
75	8.18		32.906		25.63	238.3	0.244	4.37	
100	7.92	0.00	33.482	0.001	26.12	192.2	0.298	3.64	0.00
150	7.16		33.821		26.49	157.3	0.385	2.22	
200	6.93	---	33.883	---	26.57	150.4	0.462	1.99	---

STATION 288-015 OBSERVED VALUES													
DATE	6/11/61	HR	12	LAT	48-00N	LONG	125-23W	SDG	642	WEA			
SECDI	8	BA	16	CL	6	AMT	9	DRY	12.2	WET	10.0	RELHU	76
WVEL	3	DIR	33	SEA	1	DIR	33	SWL	4	DIR	06	WA	00.00
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	2	0	12.70	30.764	23.20	6.40			0.97	2.82	45.92		
A	2	3							0.84	3.16			
	2	5	12.70	30.783	23.21	6.38							
	2	10	12.16	31.007	23.49								
A	2	11							0.87	2.48			
A	2	20	9.29	31.436	24.31	4.73			0.50	0.83			
	22												
	2	30	8.87	31.837	24.69	4.47							
	2	50	8.75	32.511	25.23	5.82							
	2	75	8.19	32.903	25.62	4.41							
	2	100	8.08	33.466	26.08	3.80							
	2	125	7.58	33.777	26.40	3.01							
	2	150	7.30	33.888	26.52	2.50							
	2	175	7.02	33.928	26.59	2.30							
	1	200	6.76	33.966	26.66	2.03							
	1	250	6.40	33.988	26.72	1.77							
	1	300	5.88	34.018	26.81	1.53							
	1	400	5.59	34.061	26.88	1.13							
	1	500	5.14	34.116	26.98	0.90							
	1	599	4.88	34.156	27.04	0.76							

STATION 288-015 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.70		30.764		23.20	468.5	0.000	6.40	
10	12.16		31.007		23.49	441.1	0.046	5.88	0.14
20	9.29		31.436		24.31	362.8	0.086	4.73	
30	8.87		31.837		24.69	326.9	0.121	4.47	
50	8.75		32.511		25.23	275.4	0.181	5.82	
75	8.19		32.903		25.62	238.6	0.245	4.41	
100	8.08		33.466		26.08	195.7	0.299	3.80	
150	7.30		33.888		26.52	154.2	0.387	2.50	
200	6.76		33.966		26.66	141.9	0.461	2.03	
250	6.40		33.988		26.72	136.3	0.531	1.77	
300	5.88		34.018		26.81	128.1	0.597	1.53	
400	5.59		34.061		26.88	122.6	0.722	1.13	
500	5.14		34.116		26.98	114.1	0.840	0.90	

STATION 288-016 OBSERVED VALUES									
DATE 6/11/61		HR 15	LAT 47-SON		LONG 125-27W	SDG 1010	WEA		
SECDI 17	BA 14	CL	AMT	DIR	DRY 12.8	WET 10.3	RELHU 71	VIS 7	
WVEL 2	DIR 32	SEA			SWL	DIR 22	WA 15, 15, 15		
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
									PROD-I
									PROD-S
2	0	13.28	31.358	23.54	6.16				
2	10	13.19	31.388	23.58	6.17				
2	19	10.06	32.215	24.79	6.63				
2	29	9.30	32.467	25.11	6.57				
2	48	8.72	32.553	25.27	6.36				
2	72	8.61	33.008	25.64	4.96				
2	97	8.30	33.544	26.11	3.73				
2	121	7.90	33.750	26.33	2.99				
2	145	7.47	33.838	26.46	2.72				
3	169	7.22	33.903	26.55	2.44				
1	194	7.06	33.929	26.59	2.26				
1	244	6.47	33.990	26.72	1.93				
1	292	6.06	34.020	26.79	1.55				
1	390	5.48	34.073	26.91	1.08				
1	488	4.96	34.139	27.02	0.53				
1	586	4.57	34.203	27.11	0.49				
1	782	4.13	34.296	27.23	0.31				
1	978	3.62	34.381	27.35	0.31				

STATION 288-016 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.28		31.358		23.54	435.5	0.000	6.16	
10	13.19		31.388		23.58	431.8	0.044	6.17	
20	9.91	0.04	32.259	0.008	24.85	311.2	0.081	6.64	0.01
30	9.25	0.01	32.475	0.006	25.13	285.2	0.111	6.57	0.01
50	8.70	0.01	32.582	0.004	25.30	269.4	0.166	6.26	0.02
75	8.58	0.00	33.079	0.007	25.70	231.2	0.229	4.79	0.00
100	8.25	0.00	33.581	0.003	26.14	189.6	0.281	3.61	0.00
150	7.41	0.00	33.854	0.000	26.48	158.2	0.368	2.66	0.00
200	6.90	0.00	33.953	0.005	26.63	144.8	0.444	2.20	0.03
250	6.41	0.00	33.995	0.000	26.73	136.0	0.514	1.88	0.00
300	6.01	0.00	34.024	0.000	26.80	129.2	0.581	1.51	0.01
400	5.42	0.00	34.079	0.000	26.92	119.1	0.705	1.01	0.01
500	4.91	0.00	34.147	0.000	27.03	109.0	0.819	0.51	0.01
600	4.53	0.01	34.211	0.000	27.12	100.9	0.924	0.48	0.00
700	4.29	0.02	34.260	0.002	27.19	95.3	1.022	0.38	0.01
800	4.09	---	34.304	---	27.25	90.6	1.115	0.30	---

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STATION 288-017 OBSERVED VALUES

DATE 6/11/61 HR 18 LAT 47-39N LONG 125-45W SDG 1392 WEA
 SECD 1 13 BA 15 CL 1 AMT 1 DRY SWL 1 DIR 28 WA RELHU VIS
 WVEL 6 DIR 26 SEA DIR

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	0				0.74		13		0.30	0.61	3.56
A	5				0.76		25		0.39	0.64	3.96
A	18				0.77		6	1.7	0.60	0.77	1.70
A	35				0.81		6		0.33	0.60	0.30

STATION 288-017 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 288-018 OBSERVED VALUES									
DATE	6/11/61	HR	21	LAT	47-34N	LONG	125-47W	SDG	1374
SEC	01	BA	16	CL	4	AMT	2	WET	10.0
WVEL	17	DIR	SEA	1	DIR	SWL	2	DIR	BTM
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
3	0	13.36	31.649	23.75	6.17	0.45	14	1.5	
3	10	13.16	31.649	23.79	5.32	0.45	11	0.3	
3	20	12.64	31.778	23.99	6.34	0.50	13	0.6	
3	30	10.00	32.256	24.83	6.45	0.84	17		
3	50	8.80	32.533	25.24	5.68	1.14	16	9.4	
3	75	8.19	32.723	25.48	4.45	1.40	22	13.9	
3	100	8.00	33.367	26.01	4.17	1.88	43	27.3	
3	125	8.00	33.682	26.26	3.26	2.32	43	27.3	
3	150	7.68	33.803	26.40	2.95	2.41	45	29.1	
3	175	7.31	33.919	26.55	2.32	2.40	53	31.1	
1	200	7.03	33.929	26.59	2.13	2.58	56		
1	242	6.50	33.989	26.71	1.94	2.65	59		
1	291	6.00	34.030	26.81	1.64	2.89	77		
1	388	5.30	34.092	26.94	1.03	2.77	90	34.7	
1	485	4.85	34.145	27.04	0.65	2.84	104	40.7	
1	583	4.42	34.207	27.13	0.43	3.26	120	41.7	
1	777	3.96	34.333	27.28	0.32	3.26	132	40.8	
2	971	3.60	34.396	27.37	0.32	3.38	151		
2	1165	3.15	34.473	27.47	0.45	3.30	163		
2	1360	2.78	34.516	27.54	0.65		182	39.2	

STATION 288-018 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEO.POT. ANOMALY	OXY.	E(O)
0	13.36		31.649		23.75	415.6	0.000	6.17	
10	13.16		31.649		23.79	412.0	0.042	5.32	
20	12.64		31.778		23.99	393.1	0.082	6.34	
30	10.00		32.256		24.83	313.0	0.117	6.45	
50	8.80		32.533		25.24	274.5	0.176	5.68	
75	8.19		32.723		25.48	252.0	0.242	4.45	
100	8.00		33.367		26.01	201.9	0.299	4.17	
150	7.68		33.803		26.40	165.8	0.391	2.95	
200	7.03		33.929		26.59	148.3	0.469	2.13	
250	6.41	0.00	33.997	0.001	26.73	135.8	0.540	1.89	0.00
300	5.92	0.00	34.036	0.000	26.82	127.3	0.606	1.58	0.00
400	5.24	0.00	34.099	0.000	26.96	115.5	0.727	0.97	0.00
500	4.78	0.00	34.154	0.000	27.05	107.0	0.839	0.61	0.00
600	4.37	0.00	34.219	0.001	27.15	98.3	0.941	0.41	0.01
700	4.14	0.01	34.267	0.005	27.23	91.6	1.036	0.33	0.03
800	3.92	0.00	34.342	0.001	27.29	85.8	1.125	0.31	0.00
1000	3.53	0.00	34.409	0.000	27.39	78.0	1.289	0.33	0.00
1200	3.08	---	34.483	---	27.49	68.7	1.435	0.48	---

STATION 288-019 OBSERVED VALUES									
DATE	6/12/61	HR	07	LAT	47-20N	LONG	126-04W	SDG	1774
SECD	1	BA	18	CL	3	AMT	4	WET	8.9
WVEL	5	DIR	30	SEA	1	DIR	30	SWL	12.4
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
3	0	13.27	31.959	24.01	6.12				
3	10	13.12	31.985	24.06	6.15				
3	20	12.02	32.500	24.67	6.69				
3	30	10.53	32.578	24.99	6.82				
3	50	8.78	32.604	25.30	6.44				
3	75	8.29	32.864	25.58	5.53				
3	100	8.12	33.454	26.06	3.92				
3	124	7.94	33.737	26.31	3.26				
3	149	7.65	33.801	26.41	3.04				
2	174	7.31	33.851	26.49	2.90				
2	199	7.20	33.898	26.55	2.70				
2	235	6.82	33.958	26.64	2.39				
2	283	6.39	33.989	26.73	1.94				
2	381	5.63	34.049	26.87	1.29				
2	578	4.68	34.210	27.11	0.52				
1	586	4.56	34.182	27.10	0.54				
1	778	4.06	34.324	27.26	0.30				
1	980	3.55	34.408	27.38	0.34				
1	1179	3.12	34.467	27.47	0.45				
1	1373	2.72	34.513	27.54	0.64				
1	1580	2.34	34.564	27.62	0.93				

STATION 288-019 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.27		31.959		24.01	391.1	0.000	6.12	
10	13.12		31.985		24.06	386.6	0.039	6.15	
20	12.02		32.500		24.67	328.8	0.075	6.69	
30	10.53		32.578		24.99	297.7	0.106	6.82	
50	8.78		32.604		25.30	269.0	0.163	6.44	
75	8.29		32.864		25.58	243.0	0.227	5.53	
100	8.12		33.454		26.06	197.1	0.282	3.92	0.00
150	7.63	0.00	33.803	0.000	26.41	165.2	0.373	3.03	0.00
200	7.19	0.00	33.900	0.000	26.55	152.6	0.452	2.69	0.00
250	6.68	0.00	33.971	0.002	26.67	141.2	0.526	2.25	0.00
300	6.25	0.00	33.999	0.000	26.75	134.2	0.594	1.81	0.00
400	5.51	0.00	34.061	0.001	26.89	121.5	0.722	1.19	0.00
500	4.95	0.01	34.132	0.005	27.01	110.7	0.838	0.77	0.02
600	4.56	0.02	34.210	0.010	27.12	101.3	0.944	0.49	0.02
700	4.26	0.00	34.280	0.004	27.21	93.5	1.042	0.34	0.02
800	4.00	0.00	34.335	0.001	27.28	87.3	1.132	0.30	0.00
1000	3.50	0.00	34.415	0.000	27.39	77.3	1.297	0.35	0.00
1200	3.08	0.00	34.472	0.000	27.48	69.5	1.443	0.47	0.00
1500	2.48	---	34.544	---	27.59	59.1	1.636	0.81	---

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STATION 288-020				OBSERVED VALUES									
DATE SECD1 WVEL	6/12/61 29 DIR	HR 19 BA 21 SEA 2	CL 2 DIR	LAT 46-56N AMT 0	LONG 126-31W DRY 13.4 SWL 9	126-31W WET 9.9 DIR 26	SDG 2560 RELHU 64 WA 00, 04, 00	WEA 18 VIS 9					
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
C	3	0	31.866	23.85	6.14	0.78	7	0.0	0.10	0.08	1.48		
	3	10	31.866	23.96	6.15	0.81	7	0.0	0.09	0.14	1.28		
	3	12											
A	3	20	32.008	24.14	6.31								
	3	30	32.240	24.49	6.61								
	3	40											
A	3	50	32.586	25.25	6.31	1.03	6	1.8	0.30	0.26	0.80		
	3	75	32.854	25.53	5.41	0.43	13	11.6	0.09	0.02	0.12		
	3	77											
A	3	100	33.326	25.97	4.28								
	3	125	33.654	26.26	3.48								
	3	150	33.793	26.44	3.11								
3	3	175	33.849	26.51	2.99								
	3	200	33.914	26.59	2.76								
	2	248	33.964	26.70	2.21								
2	2	297	34.013	26.79	1.84								
	2	396	34.077	26.91	1.05								
	2	597	34.193	27.11	0.50								
2	2	796	34.324	27.27	0.31								
	2												
	2												
2	2	998	34.418	27.40	0.36								
	2	1193	34.464	27.47	0.67								
	1	1373	34.513	27.55	0.65								
1	1	1602	34.551	27.60	0.88								
	1												
	1												
1	1	1803	34.584	27.65	1.22								
	1	1962	34.616	27.69	1.49								
	1	2195	34.630	27.71	1.68								

STATION 288-020 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.70		31.866		23.85	406.1	0.000	6.14	
10	13.18		31.866		23.96	396.4	0.041	6.15	
20	12.78		32.008		24.14	378.8	0.079	6.31	
30	11.90		32.230		24.49	346.0	0.116	6.61	
50	8.98		32.586		25.25	273.3	0.178	6.31	
75	8.54		32.854		25.53	247.3	0.243	5.41	
100	8.11		33.326		25.97	206.5	0.299	4.28	
150	7.39		33.793		26.44	162.5	0.392	3.11	
200	6.93		33.914		26.59	148.1	0.469	2.76	
250	6.43	0.02	33.982	0.009	26.72	137.1	0.541	2.28	0.01
300	5.98	0.00	34.015	0.000	26.80	129.6	0.607	1.81	0.00
400	5.43	0.00	34.079	0.000	26.92	119.2	0.732	1.03	0.00
500	4.94	0.00	34.137	0.001	27.02	110.1	0.846	0.65	0.04
600	4.53	0.00	34.195	0.000	27.11	102.0	0.952	0.49	0.00
700	4.22	0.01	34.262	0.002	27.20	94.4	1.051	0.36	0.00
800	3.97	0.00	34.326	0.000	27.28	87.6	1.141	0.31	0.00
1000	3.50	0.00	34.419	0.000	27.40	76.9	1.306	0.36	0.00
1200	3.07	0.00	34.466	0.000	27.47	69.9	1.453	0.67	0.00
1500	2.51	0.01	34.535	0.001	27.58	60.1	1.648	0.76	0.01
2000	1.87	---	34.621	---	27.70	48.5	1.919	1.54	---

STATION 288-020X OBSERVED VALUES

DATE 8/12/61 HR 13 LAT 47-35N LONG 126-10W SDG 2560 WEA 18
 SECDI 29 BA 21 CL 2 AMT 0 DRY 13.4 WET 9.9 RELHU 90 VIS
 WVEL DIR SEA 9 DIR SWL DIR 26 WA

DEPTH 0
 A CHL-A PROD-I PROD-S
 0.41 4.08

STATION 288-021 OBSERVED VALUES									
DATE	6/13/61	HR	06	LAT	46-30N	LONG	127-01W	SDG	2650
SEC	DI	18	BA	20	CL	5	AMT	9	DRY
WVEL	3	DIR	11	SEA	1	DIR	11	SWL	1
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
PROD-I	PROD-S								
3	0	13.40	32.058	24.06	6.35	0.32	10	0.4	
3	10	13.38	32.408	24.33	6.34	0.37	7	0.3	
3	20	13.14	32.432	24.40	6.40	0.40	7	0.0	
3	30	11.68	32.505	24.73	6.82	0.52	4	0.6	
3	50	9.32	32.585	25.20	6.73	0.90	14	5.6	
3	75	8.54	32.696	25.41	6.44	1.07	18	9.9	
3	100	7.92	33.326	25.99	4.54	1.66	32	21.1	
3	125	7.68	33.686	26.31	3.70	2.04	38	29.5	
3	150	7.30	33.872	26.51	2.87	1.97	50	34.6	
3	175	7.10	33.927	26.58	2.61	2.04	53	36.0	
3	200	6.81	33.965	26.65	2.44	2.34	58	37.3	
2	244	6.34	33.996	26.74	1.94	2.66	62	34.8	
2	292	5.88	34.041	26.83	1.42	2.44	77	36.7	
2	390	5.32	34.124	26.97	0.95	2.61	94	38.8	
2	584	4.52	34.226	27.13	0.33	3.01	113	42.1	
2	785	3.97	34.331	27.28	0.35	3.00	132	41.8	
2	980	3.49	34.410	27.39	0.35	2.99	157	42.2	
2	1182	3.05	34.473	27.48	0.54	3.14	151	42.1	
2	1369	2.68	34.506	27.54	0.66	3.34	173	42.4	
1	1563	2.36	34.550	27.60	0.91	2.54	179	41.3	
1	1766	2.20	34.577	27.64	1.21	2.84	192	40.6	
1	1964	1.92	34.606	27.68	1.51	2.62	201	39.9	
1	2155	1.82	34.622	27.70	1.67	2.57	185	37.5	
1	2363	1.76	34.630	27.72	1.79	2.50	203	38.7	
1	2542	1.74	34.644	27.73	1.79	3.20	210	39.7	

STATION 288-021 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.40		32.058		24.06	386.2	0.000	6.35	
10	13.38		32.408		24.33	360.4	0.038	6.34	
20	13.14		32.432		24.40	354.3	0.074	6.40	
30	11.68		32.505		24.73	322.6	0.107	6.82	
50	9.32		32.585		25.20	278.5	0.168	6.73	
75	8.54		32.696		25.41	259.0	0.235	6.44	
100	7.92		33.326		25.99	203.8	0.293	4.54	
150	7.30		33.872		26.51	155.4	0.382	2.87	
200	6.81		33.965		26.65	142.7	0.457	2.44	
250	6.27	0.01	34.012	0.004	26.76	132.8	0.526	1.89	0.05
300	5.82	0.01	34.048	0.000	26.85	125.2	0.590	1.36	0.01
400	5.27	0.00	34.130	0.001	26.98	113.5	0.710	0.91	0.00
500	4.82	0.01	34.187	0.003	27.07	105.1	0.819	0.53	0.01
600	4.47	0.00	34.235	0.000	27.15	98.3	0.921	0.32	0.01
700	4.18	0.01	34.288	0.001	27.22	92.0	1.016	0.30	0.03
800	3.93	0.00	34.338	0.000	27.29	86.3	1.105	0.35	0.00
1000	3.44	0.00	34.417	0.000	27.40	76.4	1.267	0.37	0.00
1200	3.01	0.00	34.477	0.000	27.49	68.4	1.412	0.55	0.00
1500	2.45	0.00	34.536	0.001	27.59	59.3	1.604	0.82	0.00
2000	1.89	0.00	34.600	0.000	27.69	49.6	1.876	1.55	0.00
2500	1.74	---	34.640	----	27.73	47.3	2.118	1.80	---

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M M

STATION 288-022 OBSERVED VALUES											
DATE	6/13/61	HR	16	LAT	46-10N	LONG	126-31W	SDG	2605	WEA	
SECDI	15	BA	24	CL	0	AMT	DRY	12.9	WET	11.4	RELHU 84 VIS 7
WVEL	DIR	00	SEA	0	DIR	00	SWL	1	DIR	00	WA 00, 03, 00
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
3	0	13.22	32.509	24.44	6.48						
3	10	12.60	32.487	24.55	6.73						
3	20	11.86	32.530	24.72	6.69						
3	30	10.25	32.615	25.07	6.73						
3	50	9.58	32.626	25.19	6.68						
3	75	8.68	32.662	25.36	6.42						
3	100	7.94	33.178	25.87	5.07						
3	125	7.50	33.556	26.23	4.47						
3	150	7.32	33.772	26.43	3.82						
3	199	6.80	33.904	26.60							
2	200	6.80	33.898	26.60	3.32						
2	249	6.37	33.948	26.70	2.34						
2	299	5.82	33.965	26.78	1.94						
2	398	5.20	34.041	26.91	1.11						
2	597	4.62	34.211	27.11	0.40						
2	796	3.95	34.328	27.28	0.24						
2	997	3.46	34.419	27.40	0.36						
2	1198	3.04	34.469	27.48	0.45						
1	1397	2.68	34.519	27.55	0.73						
2	1398	2.68	34.514	27.55	0.64						
1	1598	2.36	34.558	27.61	0.93						
1	1798	2.10	34.579	27.65	1.20						
1	1999	1.91	34.607	27.69	1.42						
1	2200	1.80	34.626	27.71	1.66						
1	2401	1.77	34.635	27.72	1.76						
1	2602	1.72	34.650	27.73	1.85						

STATION 288-022 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.22		32.509		24.44	349.7	0.000	6.48	
10	12.60		32.487		24.55	340.0	0.035	6.73	
20	11.86		32.530		24.72	323.7	0.068	6.69	
30	10.25		32.615		25.07	290.5	0.099	6.73	
50	9.58		32.626		25.19	279.4	0.156	6.68	
75	8.68		32.662		25.36	263.6	0.224	6.42	
100	7.94		33.178		25.87	215.1	0.284	5.07	
150	7.32		33.772		26.43	163.1	0.378	3.82	
200	6.80		33.898		26.60	147.5	0.456	3.32	
250	6.36	0.00	33.948	0.000	26.70	138.7	0.527	2.33	0.00
300	5.81	0.00	33.966	0.000	26.78	131.2	0.595	1.93	0.00
400	5.19	0.00	34.043	0.000	26.92	119.1	0.720	1.10	0.00
500	4.85	0.04	34.130	0.003	27.02	109.6	0.834	0.63	0.03
600	4.61	0.00	34.213	0.000	27.12	101.6	0.940	0.39	0.00
700	4.27	0.01	34.277	0.001	27.21	93.8	1.038	0.27	0.01
800	3.94	0.00	34.330	0.000	27.28	86.9	1.128	0.24	0.00
M	1000	0.00	34.420	0.000	27.40	76.3	1.291	0.36	0.00
M	1200	0.00	34.469	0.000	27.48	69.2	1.437	0.45	0.00
M	1500	0.00	34.540	0.000	27.58	59.7	1.630	0.82	0.02
M	2000	0.00	34.607	0.000	27.69	50.0	1.904	1.42	0.00
	2500	1.75	34.642	0.000	27.73	47.2	2.147	1.81	0.00

STATION 288-22X OBSERVED VALUES

DATE 6/13/61 HR 13 LAT 46-12N LONG 126-39W WEA VIS
 SECDI CL AMT DIR SWL DIR WET SDG RELHU
 WVEL DIR SEA DIR SWL DIR WA

DEPTH

0

A

CHL-A PROD-I PROD-S
 1.10 7.24

STATION 288-023 OBSERVED VALUES

DATE 6/13/61 HR 18 LAT 46-06N LONG 126-25W SDG 2707 WEA
 SECDI 16 BA 22 CL 0 AMT 0 DRY WET VIS
 WVEL 2 DIR 19 SEA DIR SWL 1 DIR 03 WA

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	0					0.91	4	0.8	0.25	0.61	7.92
A	7					0.91	3	0.2	0.30	0.89	7.84
A	22					0.95	3	0.8	0.47	1.23	2.68
A	45					1.10	8	3.9	0.18	0.17	0.54

STATION 288-023 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 288-024 OBSERVED VALUES											
DATE 6/14/61	HR 01	LAT 45-48N	LONG 126-05W	SDG 2560	WEA 05						
SECDI 20	BA 25	CL	DRY 15.0	WET 13.9	RELHU 89	VIS 7					
WVEL 3	DIR 27	SEA 0	DIR	SWL 0	WA 00.02.03						
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
3	0	14.14	32.461	24.22	6.40						
3	10	13.06	32.506	24.47	6.69						
3	20	12.66	32.518	24.56	6.66						
3	30	11.96	32.568	24.73	7.36						
3	50	9.82	32.635	25.16	6.74						
3	75	9.02	32.728	25.36	6.46						
3	100	8.54	33.016	25.66	5.36						
3	125	8.46	33.554	26.09	3.71						
3	150	7.79	33.776	26.37	3.09						
3	175	7.40	33.859	26.49	2.74						
3	197	7.00	33.936	26.60	2.50						
3	246	6.55	33.987	26.70	1.20						
2	248	6.50	33.982	26.71	2.16						
2	297	6.24	34.010	26.76	1.72						
2	397	5.46	34.073	26.91	1.08						
2	597	4.44	34.201	27.13	0.48						
2	794	4.01	34.327	27.27	0.32						
2	997	3.51	34.409	27.39	0.28						
2	1192	3.04	34.469	27.48	0.47						
1	1388	2.69	34.535	27.56	0.65						
2	1395	2.66	34.514	27.58	0.64						
1	1587	2.34	34.554	27.61	0.86						
1	1786	2.13	34.580	27.65	1.18						
1	1988	1.93	34.604	27.68	1.55						
1	2222	1.81	34.622	27.71	1.70						
1	2384	1.76	34.643	20.87	1.78						

STATION 288-024 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	14.14		32.461		24.22	371.0	0.000	6.40	
10	13.06		32.506		24.47	347.1	0.036	6.69	
20	12.66		32.518		24.56	339.0	0.071	6.66	
30	11.96		32.568		24.73	322.9	0.104	7.36	
50	9.82		32.635		25.16	282.5	0.164	6.74	
75	9.02		32.728		25.36	263.8	0.233	6.46	
100	8.54		33.016		25.66	235.7	0.295	5.36	
150	7.79		33.776		26.37	169.3	0.396	3.09	
200	6.96	0.00	33.942	0.002	26.61	146.4	0.475	2.47	0.01
250	6.51	0.01	33.987	0.002	26.71	137.8	0.546	1.66	0.32
300	6.22	0.00	34.012	0.000	26.77	132.9	0.614	1.70	0.00
400	5.44	0.00	34.075	0.000	26.91	119.7	0.740	1.07	0.00
500	4.85	0.01	34.139	0.000	27.03	109.5	0.855	0.69	0.02
600	4.43	0.00	34.203	0.000	27.13	100.3	0.959	0.48	0.00
700	4.18	0.03	34.260	0.002	27.21	93.4	1.056	0.36	0.01
800	4.00	0.00	34.320	0.000	27.28	87.6	1.146	0.32	0.00
1000	3.50	0.00	34.400	0.000	27.39	77.6	1.312	0.28	0.00
1200	3.02	0.00	34.471	0.000	27.48	68.9	1.458	0.48	0.00
1500	2.48	0.01	34.545	0.005	27.59	59.0	1.650	0.76	0.01
2000	1.92	0.00	34.605	0.000	27.68	50.3	1.923	1.56	0.00

M M

M M M

STATION 288-025 OBSERVED VALUES														
DATE	6/14/61	HR	08	LAT	45-26N	LONG	125-36W	SDG	2426	WEA	45			
SECDI	12	BA	CL	X	AMT	9	DRY	12.9	WET	12.9	RELHU	99	VIS	4
WVEL	5	DIR	01	SEA	1	DIR	01	SWL	1	DIR	23	WA	15, 20, 19	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S			
P	1	0	14.27	31.499	23.45	6.10	0.42	7	0.0	0.13	0.36			
A	1	7	13.84	31.938	23.88	6.23	0.44	5	0.0	0.18	0.39			
A	16	12.79	32.236	24.32	6.42	0.50	5	0.0	0.15	0.37				
A	1	19	32.260	24.36	6.42	0.56	4	0.0	0.18	0.25				
	29	12.64												
	32													
	48	10.57	32.550	24.97	6.78	0.77	3	0.1						
	72	9.80	32.640	25.17	6.03	1.07	12	6.5						
	97	9.30	32.861	25.42	5.38	1.30	19	11.1						
	121	8.70	33.471	25.99	3.88	1.96	32	22.1						
	145	8.27	33.630	26.18	3.40	1.78	39	25.2						
	169	7.96	33.733	26.31	3.06	1.98	43	26.6						
	188	7.48	33.880	26.49	2.71	2.31	47	30.7						
	192	7.50	33.872	26.48	2.77	2.20	44	27.6						
	235	6.89	33.957	26.63	2.33	2.64	56	33.0						
2	282	6.38	33.996	26.73	1.96	2.23	76	33.9						
2	375	5.66	34.045	26.86	1.28	2.46	85	35.8						
2	565	4.81	34.194	27.08	0.50	2.97	112	41.4						
2	754	4.21	34.324	27.25	0.26	3.02								
2	941	3.64	34.399	27.37	0.30	3.28	152	40.4						
2	1132	3.21	34.453	27.45	0.44	3.20	158	41.6						
2	1322	2.83	34.499	27.52	0.64	3.50	189	41.4						
3	1348	2.82	34.496	27.52	0.55	2.94	156	38.8						
3	1554	2.50	34.510	27.56	0.77	3.10	176	39.7						
3	1750	2.20	34.570	27.63	1.11	2.94	167	37.9						
3	1944	1.97	34.594	27.67	1.37	2.80	190	39.6						
3	2149	1.84	34.623	27.70	1.59	2.60	167	35.6						
3	2343	1.76	34.639	27.72	1.76	3.10	196	38.7						

STATION 288-025 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	14.27		31.499		23.45	444.1	0.000	6.10	
10	13.84		31.938		23.88	403.7	0.043	6.23	
20	12.77	0.03	32.244	0.006	24.33	361.2	0.081	6.42	0.01
30	12.54	0.03	32.274	0.004	24.39	355.1	0.117	6.44	0.01
50	10.46	0.02	32.561	0.005	24.99	298.3	0.182	6.74	0.02
75	9.74	0.01	32.652	0.005	25.19	280.4	0.255	5.97	0.02
100	9.22	0.01	32.939	0.015	25.49	251.6	0.321	5.19	0.03
150	8.21	0.01	33.640	0.004	26.20	184.8	0.430	3.33	0.01
200	7.37	0.00	33.898	0.005	26.52	155.2	0.515	2.68	0.00
250	6.72	0.00	33.972	0.001	26.67	141.6	0.589	2.21	0.00
300	6.22	0.00	34.006	0.001	26.76	133.3	0.658	1.82	0.00
400	5.52	0.01	34.063	0.002	26.89	121.5	0.786	1.14	0.01
500	5.04	0.02	34.140	0.003	27.01	111.1	0.902	0.69	0.01
600	4.69	0.01	34.221	0.001	27.11	102.0	1.008	0.42	0.01
700	4.37	0.01	34.291	0.001	27.21	94.0	1.106	0.29	0.01
800	4.06	0.00	34.346	0.001	27.28	87.2	1.197	0.25	0.01
1000	3.50	0.00	34.417	0.001	27.40	77.0	1.361	0.33	0.00
1200	3.07	0.00	34.470	0.000	27.48	69.6	1.508	0.48	0.01
1500	2.57	0.01	34.507	0.003	27.55	62.9	1.708	0.72	0.02
2000	1.93	0.00	34.602	0.001	27.68	50.5	1.991	1.43	0.00

M M

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STATION 288-026 OBSERVED VALUES									
DATE 6/14/61 HR 17 LAT 45-26N LONG 125-17W SDG 1842 WEA									
SECDI 19 BA 24 CL 4 AMT 8 DRY 14.6 WET 14.4 RELHU 98 VIS									
WVEL 13 DIR 36 SEA 3 DIR 36 SWL 3 DIR 36 WA 45.25.38.45									
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A
P	2	0	15.27	29.840	21.97	5.96			0.17
A	2	8	14.84	30.399	22.49	5.97			0.15
	2	18	13.24	32.102	24.13	6.24			
A	2	26	11.86	32.373	24.60	6.74			0.18
	2	45	10.46	32.553	24.99	6.80			
A	2	52							0.18
	2	68	9.78	32.640	25.17	6.06			
	2	90	9.36	32.866	25.41	5.36			
	3	135	9.10	33.139	25.67	4.61			
	3	167	8.24	33.502	26.08	3.65			
	3	185	8.10	33.629	26.20	3.29			
	3	193	7.70	33.756	26.36	3.17			
	4	264	6.57	33.971	26.69	2.18			
	1	376	5.56	34.061	26.89	1.18			
	1	436	5.12	34.106	26.98	0.84			
	4	437	5.24	34.091	26.95	0.94			
	1	492	4.85	34.169	27.06	0.60			
	4	524	4.91	34.162	27.04	0.56			
	1	557	4.61	34.201	27.11	0.50			
	1	646	4.37	34.266	27.19	0.37			
	1	727	4.14	34.296	27.23	0.34			
	1	812	3.93	34.340	27.29	0.30			

PROD-S

PROD-I

CHL-A

STATION 288-027 OBSERVED VALUES

DATE 6/14/61 HR 18 LAT 45-25N LONG 125-14W SDG 1920 WEA
 SECDI 16 BA 24 CL AMT 2 DRY WET RELHU VIS
 WVEL 16 DIR 36 SEA DIR 36 SWL DIR 36 WA

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	0					0.72	11	0.3		0.17	1.94
A	6					0.70	7	0.0		0.22	2.36
A	22					0.81	3	0.0		0.31	1.06
A	43					1.01	5	1.4		0.75	0.20

STATION 288-027 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 288-026 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.27	0.02	29.830	0.042	21.97	585.9	0.000	5.96	0.00
10	14.69	0.01	30.595	0.038	22.67	518.9	0.056	5.99	0.02
20	12.90	0.01	32.229	0.009	24.29	364.8	0.100	6.35	0.02
30	11.54	0.02	32.423	0.009	24.70	326.2	0.134	6.81	0.02
50	10.25	0.03	32.572	0.009	25.04	294.0	0.196	6.68	0.03
75	9.62	0.00	32.708	0.007	25.25	274.5	0.268	5.82	0.01
100	9.32	0.06	32.926	0.015	25.47	254.0	0.334	5.18	0.05
150	8.68	0.06	33.311	0.013	25.87	216.8	0.451	4.16	0.03
200	7.48	0.06	33.816	0.022	26.44	162.9	0.546	3.06	0.00
250	6.61	0.10	33.998	0.040	26.70	138.2	0.622	2.36	0.00
300	6.18	0.03	34.017	0.011	26.78	132.0	0.689	1.80	0.01
400	5.41	0.02	34.072	0.005	26.91	119.5	0.815	1.07	0.03
500	4.87	0.02	34.167	0.003	27.05	107.1	0.928	0.59	0.00
600	4.44	0.04	34.238	0.001	27.16	97.8	1.031	0.43	0.00
700	4.22	0.00	34.287	0.001	27.22	92.5	1.126	0.35	0.00
800	3.96	---	34.333	---	27.28	86.9	1.215	0.31	---

CHL-A PROD-I PROD-S
0.73 7.86

STATION 288-26X OBSERVED VALUES

DATE 6/14/61 HR 14 CL 45-21N LONG 125-35W SDG WEA
SECDI BA DIR SWL DIR WET RELHU VIS
WVEL SEA DIR WA

DEPTH

A

0

STATION 288-028 OBSERVED VALUES

DATE 6/14/61 HR 23 LAT 45-29N LONG 124-52W SDG 1070 WEA 05
 SECDI 16 BA 22 CL 4 AMT 7 DRY 15.0 WET 14.4 RELHU 96 VIS
 WVEL 13 DIR 36 SEA 5 DIR 36 SWL DIR WA 30

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	15.42	28.103	20.61	6.07				0.35	
A	1	6	15.26	28.308	20.80	6.16				0.85	
	1	17	11.85	32.308	24.55	7.18					
A	1	22								0.19	
	1	26	10.20	32.408	24.92	6.83					
	1	43	9.19	32.544	25.19	6.22					
P	1	43								0.23	
	1	65	8.98	32.846	25.46	5.41					
	1	87	8.60	33.232	25.82	4.55					
	1	108	8.30	33.604	26.15	3.52					
	1	130	7.83	33.758	26.35	2.52					
	1	152	7.52	33.835	26.45	2.72					
	1	173	7.28	33.892	26.53	2.52					

STATION 288-028 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.42		28.103		20.61	716.5	0.000	6.07	
10	14.87	0.09	28.810	0.133	21.27	653.7	0.069	6.30	0.04
20	11.13	0.06	32.601	0.172	24.91	305.8	0.117	7.15	0.06
30	9.81	0.06	32.439	0.005	25.01	296.4	0.147	6.68	0.00
50	9.07	0.05	32.628	0.002	25.27	271.4	0.204	5.97	0.00
75	8.81	0.01	33.016	0.003	25.62	239.3	0.268	5.04	0.01
100	8.42	0.01	33.475	0.009	26.04	199.9	0.323	3.92	0.01
150	7.54	0.00	33.820	0.001	26.44	161.9	0.413	2.69	0.02

STATION 288-029 OBSERVED VALUES

DATE 6/15/61 HR 04 LAT 45-06N LONG 125-00W SDG 1207 WEA 05
 SECDI 14 BA 22 CL X AMT 0 DRY 15.6 WET 14.4 RELHU 88 VIS 6
 WVEL 13 DIR 01 SEA 5 DIR 01 SWL DIR WA 30. --- --

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	15.56	27.729	20.29	6.03	0.37		0.16	0.19	
A	1	6	15.48	27.969	20.49	6.08	0.30		0.15	0.18	
	1	17	13.44	31.898	23.93	6.41	0.55				
A	1	19	11.84	32.402	24.62	6.84	0.64		0.14	0.10	
A	1	26							0.66	0.84	
	38										
	43	10.85	32.530	24.90	7.00	0.66					
2	65	9.31	32.575	25.19	6.28	1.08					
2	87	8.96	32.847	25.46	5.40	1.43					
3	108	8.38	33.439	26.01	3.52	2.18					
	130	7.89	33.714	26.30	3.12	2.24					
3	152	7.68	33.789	26.39	2.97	2.16					
3	173	7.47	33.846	26.47	2.73	2.40					
3	241	6.69	33.969	26.67	2.24	2.58					

STATION 288-029 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	15.56		27.729		20.29	746.8	0.000	6.03	
M	10	0.04	28.454	0.123	20.91	687.7	0.072	6.11	0.00
M	20	0.00	32.313	0.142	24.37	357.2	0.124	6.56	0.01
M	30	0.08	32.484	0.030	24.75	320.9	0.158	6.94	0.01
	50	0.05	32.539	0.013	25.00	297.4	0.220	6.84	0.03
M	75	0.06	32.662	0.005	25.30	269.7	0.291	5.96	0.04
M	100	0.01	33.213	0.025	25.80	222.1	0.353	4.21	0.10
M	150	0.00	33.787	0.003	26.39	167.2	0.450	2.98	0.00
	200	---	33.906	---	26.55	152.0	0.530	2.48	---

STATION 288-030 OBSERVED VALUES

DATE 6/15/61 HR 08 LAT 44-50N LONG 125-00W SDG 1240 WEA 02
 SECDI BA 19 CL X AMT 0 DRY 14.9 WET 14.4 RELHU 95 VIS
 WVEL 15 DIR 36 SEA 5 DIR 36 SWL 5 DIR 36 WA 25.35

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	15.28	28.541	20.97	6.04						
1	5	15.28	28.545	20.98	6.13						
1	9	15.26	28.652	21.06	6.85						
1	18	12.32	30.886	23.36	7.02						
1	27	11.21	32.267	24.63	6.41						
1	36	10.48	32.435	24.89	4.77						
1	45	10.14	32.469	24.98	3.90						
1	68	9.46	32.615	25.20	2.49						
1	91	9.06	32.881	25.47	1.92						
2	123	7.88	33.714	26.30	1.92						
2	164	7.12	33.870	26.53	1.80						
2	243	6.37	33.987	26.73	1.55						

STATION 288-030 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.28		28.541		20.97	681.5	0.000	6.04	
10	14.99	0.10	28.653	0.059	21.27	652.9	0.067	6.94	0.02
20	11.98	0.04	31.282	0.010	23.73	417.8	0.121	6.96	0.01
30	10.92	0.00	32.398	0.040	24.79	317.6	0.158	5.88	0.07
50	9.97	0.00	32.492	0.001	25.02	295.4	0.219	3.51	0.01
75	9.34	0.02	32.675	0.006	25.27	272.6	0.290	2.25	0.01
100	8.74	0.04	33.110	0.039	25.71	231.0	0.353	1.88	0.03
150	7.32	0.02	33.878	0.036	26.51	155.2	0.449	1.85	0.00
200	6.66	---	33.953	---	26.66	141.6	0.524	1.69	---

STATION 288-031 OBSERVED VALUES

DATE 6/15/61 HR 13 LAT 44-52N LONG 124-39W SDG 353 WEA 02
 SEC DI 14 BA CL AMT 0 DRY 15.6 WET 15.0 RELHU 94 VIS 9
 WVEL 13 DIR 36 SEA 5 DIR 01 SWL 5 DIR 01 WA 11

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	14.88	28.277	20.85	6.04			0.10	0.46	5.02
A	1	6	14.86	28.372	20.93	6.04			0.09	0.85	
A	1	19	12.31	32.346	24.49	6.85			0.32	0.38	
A	1	29	11.06	32.474	24.82	7.02			0.51	0.84	
	1	49	9.55	32.624	25.19	6.41					
	1	74	8.82	33.088	25.67	4.79					
	1	98	8.35	33.445	26.02	3.90					
	1	123	7.76	33.751	26.35	2.49					
	1	147	7.24	33.875	26.52	1.92					
	1	172	6.85	33.953	26.64	1.92					
	1	196	6.57	33.994	26.71	1.55					
	1	243	6.06	34.034	26.80	1.55					

STATION 288-031 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	14.88		28.277		20.85	692.9	0.000	6.04	
10	14.86		28.372		20.93	685.7	0.069	6.04	
20	12.31	0.01	32.346		24.49	345.3	0.121	6.85	
30	10.95		32.481	0.003	24.85	311.9	0.154	7.01	0.01
50	9.51	0.01	32.641	0.003	25.21	277.2	0.213	6.35	0.01
75	8.80	0.00	33.104	0.000	25.69	232.5	0.276	4.75	0.01
100	8.30	0.00	33.474	0.001	26.05	198.3	0.330	3.78	0.02
150	7.19	0.00	33.887	0.000	26.54	152.8	0.418	1.91	0.02
200	6.52	0.00	33.999	0.000	26.72	136.4	0.490	1.51	0.02

STATION 288-032 OBSERVED VALUES

DATE 6/15/61 HR 13 LAT 44-46N LONG 124-27W SDG 150 WEA 02
 SECDI 13 BA CL AMT 0 DRY 14.6 WET 14.3 RELHU 97 VIS 7
 WVEL 13 DIR 35 SEA 4 DIR 35 SWL 5 DIR 01 WA 12

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	12.16	30.823	23.34	6.34				1.97	
P	1	5	12.13	30.810	23.34	7.27				2.50	
A	1	10	12.12	30.829	23.36	6.33				2.38	
A	1	18	10.52	32.172	24.68	6.61					
A	1	20	9.19	32.554	25.20	5.43					
A	1	35								0.84	
	39	8.88	32.716	25.37	5.66						
	59	8.64	33.241	25.82	4.33						
	78	8.20	33.544	26.12	3.04						
	1	98	33.687	26.27	3.00						
	117	7.61	33.809	26.42	2.43						

STATION 288-032 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.16		30.823		23.34	454.5	0.000	6.34	
10	12.12		30.829		23.36	453.6	0.046	6.33	
20	10.52		32.172		24.68	327.4	0.085	6.61	
30	9.13	0.02	32.575	0.005	25.22	276.0	0.115	5.43	0.03
50	8.73	0.03	33.001	0.020	25.62	238.8	0.167	5.08	0.10
75	8.27	0.01	33.508	0.001	26.08	194.9	0.221	3.20	0.03
100	7.92	---	33.700	---	26.29	176.0	0.267	2.96	---

STATION 288-033 OBSERVED VALUES

DATE 6/15/61 HR 18 LAT 45-05N L-NG 124-19W SDG 221 WEA 05
 SECDI 13 BA 14 CL AMT DRY DIR 34 WET DIR 34 WA RELHU VIS
 WVEL 8 DIR 34 SEA DIR 34 SWL DIR 34 WA

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	0					0.73	11	0.0	0.49	1.28	8.72
A	5					0.73	11	0.0	0.42	1.64	14.52
A	18					0.80	7	0.0	0.56	1.60	5.28
A	35					1.16	10	5.9	0.41	0.63	0.62

STATION 288-033 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 288-034 OBSERVED VALUES													
DATE 6/15/61		HR 22		LAT 45-06N		LONG 124-19W		SDG 295		WEA 05			
SECDI 12		BA 15		CL AMT		DRY 16.4		WET 14.7		RELHU 83		VIS 7	
WVEL 10		DIR 35		SEA 4		DIR 35		SWL		DIR		WA 15	
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P	1	13.41	29.744	22.28	6.38	0.38	12	0.0		1.69			
	5	13.42	29.750	22.28	6.50	0.46	11	0.0		1.31			
A	1	13.33	29.875	22.39	6.59		11			0.73			
	16												
A	1	11.27	32.178	24.55	7.30	0.54	6	0.0					
	29	9.96	32.325	24.89	6.64	0.88	7	2.9					
A	1	9.16	32.511	25.17	5.92	1.22	12	9.8		0.52			
	39	8.78	33.004	25.61	5.10	1.48	19	16.9					
A	1	8.54	33.389	25.95	4.18	1.90	28	23.7					
	77												
A	1	8.10	33.671	26.24	3.27	2.06	35	27.9					
	97												
A	1	7.66	33.794	26.40	2.99	2.06	31	24.8					
	116												
A	1	7.37	33.880	26.51	2.63	2.42	38	29.7					
	135												
A	1	7.03	33.918	26.58	1.98	2.58	36	26.6					
	155												
A	1	6.76	33.951	26.65	2.18	2.56	38	27.7					
	174												

STATION 288-034 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.41		29.744		22.28	556.7	0.000	6.38	
10	13.33		29.875		22.39	545.8	0.056	6.59	
20	11.10	0.01	32.249	0.039	24.64	331.4	0.099	7.27	0.02
30	9.86	0.00	32.342	0.000	24.92	304.5	0.131	6.56	0.00
50	8.84	0.06	32.792	0.012	25.44	255.9	0.187	5.41	0.03
75	8.57	0.00	33.354	0.000	25.92	210.6	0.246	4.28	0.00
100	8.03	0.00	33.696	0.002	26.27	177.8	0.294	3.21	0.01
150	7.11	0.00	33.911	0.002	26.57	150.0	0.376	2.11	0.04

STATION 288-035 OBSERVED VALUES

DATE 6/16/61 HR 04 LAT 45-29N LONG 124-08W SDG 124 WEA 05
 SECD1 10 BA 13 CL AMT 0 DRY 14.4 WET 13.3 RELHU 89 VIS 7
 WVEL 15 DIR 36 SEA 5 DIR 36 SWL 5 DIR 36 WA 30.40

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	11.94	30.865	23.42	6.18	0.64	10	2.5	0.90	
A	1	3	11.94	30.865	23.42	6.18	0.64	11	2.1	1.02	
		4									
	1	5	11.96	30.850	23.40	6.18	0.44				
	1	9	11.86	30.979	23.52	6.17		10			
A		13	10.96	31.486	24.07	6.08		10		0.82	
		14									
	2	15	9.92	32.073	24.70	5.84	1.07	12	7.1		
	2	19	9.43	32.348	25.00	5.89	1.12	13	8.9		
A	2	23	9.50	32.496	25.10	6.19	1.11	10	7.0		
		27								0.29	
	2	31	8.86	32.597	25.28	6.08	1.18	11	9.4		
	2	46	8.60	33.030	25.66	4.52	1.60	22	17.9		
	2	61	8.10	33.590	26.17	3.05	2.38	38	29.0		
	2	77	7.72	33.770	26.37	2.78	2.50	42	32.1		

STATION 288-035 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
M	0	11.94	30.865		23.42	447.5	0.000	6.18	
	10	11.75	31.046	0.016	23.59	431.0	0.044	6.18	0.01
	20	9.43	32.394	0.002	25.03	293.8	0.081	5.96	0.02
	30	8.96	32.589	0.006	25.26	272.4	0.109	6.13	0.01
	50	8.47	33.192	0.016	25.81	220.8	0.158	4.07	0.04
	75	7.76	33.771	---	26.37	168.1	0.207	2.74	---

STATION 288-036 OBSERVED VALUES

DATE 6/16/61 HR 07 LAT 45-36N LONG 124-00W SDG 47 WEA 02
 SECD1 BA 13 CL AMT 0 DRY 11.7 WET 10.8 RELHU 90 VIS 7
 WVEL 15 DIR 35 SEA 5 DIR 35 SWL DIR WA 15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	8.98	33.028	25.60	4.46						
1	4	8.94	33.037	25.61	4.46						
1	9	8.94	33.045	25.62	4.40						
1	14	8.90	33.068	25.64	4.29						
1	18	8.60	33.214	25.80	3.86						
1	23	8.35	33.418	26.00	3.37						
1	33	8.13	33.567	26.15	2.95						

STATION 288-036 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	8.98		33.028		25.60	239.6	0.000	4.46	
10	8.95	0.01	33.042	0.004	25.62	238.3	0.024	4.40	0.01
20	8.49	0.00	33.299	0.004	25.89	212.5	0.047	3.65	0.01
30	8.16	---	33.559	---	26.14	188.7	0.067	3.00	---

STATION 288-037 OBSERVED VALUES

DATE 6/16/61 HR 09 LAT 45-45N LONG 124-04W SDG 89 WEA 02
 SECDI BA 14 CL AMT 0 DRY 13.9 WET 11.7 RELHU 77 VIS 7
 WVEL 13 DIR 35 SEA 6 DIR 35 SWL 5 DIR 35 WA 20

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	10.34	31.783	24.41	5.64						
1	3	10.34	31.775	24.40	5.62						
1	6	10.36	31.776	24.40	5.59						
1	9	10.32	31.775	24.41	5.60						
1	14	10.20	31.814	24.46	5.51						
1	19	9.02	32.578	25.24	4.85						
1	23	8.62	32.966	25.61	4.59						
1	28	8.56	33.103	25.72	5.52						
1	38	8.25	33.347	25.96	3.91						
1	47	8.02	33.653	26.24	2.95						
1	57	7.72	33.748	26.35	2.56						
1	66	7.32	33.861	26.50	1.80						

STATION 288-037 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	10.34	0.03	31.783	0.018	24.41	352.9	0.000	5.64	
10	10.34	0.01	31.752	0.002	24.38	355.4	0.036	5.61	0.01
20	8.88	0.01	32.696	0.004	25.36	263.2	0.067	4.73	0.02
30	8.51	0.01	33.149	0.004	25.77	224.1	0.091	5.36	0.14
50	7.94	0.00	33.693	0.010	26.28	176.0	0.131	2.82	0.04

STATION 288-038 OBSERVED VALUES													
DATE 6/16/61		HR 13		LAT 45-54N		LONG 124-15W		SDG 119		WEA 02			
SECDI 5 BA 12		CL		AMT 0		DRY 13.6		WET 13.2		RELHU 95		VIS 7	
WVEL 13 DIR 35		SEA		DIR		SWL 5		DIR 35		WA 15			
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S		
P 1	0	12.99	28.832	21.65	6.04				0.44	1.67	13.52		
A 1	3	12.98	28.869	21.68	5.99				0.41	1.55			
P 1	6	13.00	28.863	21.68	6.04				0.32	1.46			
A 1	10	13.10	29.736	22.33	6.13				0.44	1.17			
	12												
	14	12.48	31.232	23.60	6.28								
	19	10.71	31.600	24.20	6.53								
	24	9.66	32.028	24.71	5.48								
	29	9.36	32.292	24.97	5.58								
	39	8.84	32.680	25.35	5.04								
	58	8.28	33.388	25.99	3.47								
	77	7.58	33.799	26.41	2.50								
	97	7.17	33.902	26.55	2.13								
	116	6.90	33.930	26.61	1.67								

STATION 288-038 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	12.99		28.832		21.65	616.2	0.000	6.04	
10	13.10		29.736		22.33	551.8	0.059	6.13	
20	10.44	0.00	31.680	0.006	24.32	361.8	0.105	6.33	0.07
30	9.30	0.00	32.335	0.003	25.01	296.4	0.137	5.55	0.01
50	8.49	0.03	33.110	0.011	25.74	227.1	0.190	4.14	0.05
75	7.65	0.01	33.760	0.000	26.38	166.6	0.239	2.57	0.00
100	7.12	---	33.911	---	26.57	149.3	0.279	2.06	---

STATION 288-039 OBSERVED VALUES

DATE 6/16/61 HR 15 LAT 45-44N LONG 124-21W SDG 146 WEA 02
 SECD 1 8 BA 12 CL AMT 0 DRY 15.5 WET 14.4 RELHU 89 VIS 6
 WVEL 10 DIR 35 SEA 1 DIR 34 SWL 2 DIR 34 WA 25

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	14.32	26.657	19.73	6.08				0.28	2.98	
P	3	14.32	26.735	19.78	6.06				0.34	2.35	
	5	14.14	28.340	21.05	6.07						
A	1	12.94	30.236	22.74	6.14						
	11								0.36	0.91	
A	1	11.71	31.000	23.56	6.43						
	18	10.99	31.350	23.96	6.35						
A	1	22	31.529	24.15	6.33				0.22	0.46	
	23	10.69	31.703	24.33	5.94						
	27	10.43									
	36	9.56	32.161	24.83	5.30						
	54	8.66	33.056	25.67	3.86						
	72	7.96	33.592	26.20	3.04						
	91	7.38	33.825	26.46	2.11						
	109	7.08	33.903	26.57	2.12						
	127	6.87	33.939	26.62	1.76						

STATION 288-039 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	14.32		26.657		19.73	801.3	0.000	6.08	
10	12.67	0.00	30.475	0.038	22.98	489.4	0.065	6.21	0.02
20	10.83	0.03	31.436	0.013	24.06	386.9	0.109	6.37	0.02
30	10.15	0.02	31.851	0.004	24.49	345.4	0.145	5.71	0.01
50	8.80	0.03	32.874	0.010	25.51	249.3	0.205	4.16	0.02
75	7.85	0.00	33.645	0.004	26.25	178.7	0.258	2.86	0.02
100	7.21	0.01	33.875	0.004	26.53	153.2	0.300	2.08	0.05

STATION 288-040 OBSERVED VALUES

DATE 6/16/61 HR 18 LAT 45-52N LONG 124-35W SDG 168 WEA 10
 SECDI 3 BA 11 CL AMT 0 DRY 16.4 WET 15.0 RELHU 84 VIS 6
 WVEL 12 DIR 34 SEA 4 DIR 34 SWL 5 DIR 35 WA 23

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	15.06	21.917	15.95	6.27	0.84	45	2.3	2.41	3.35	28.12
A	1					0.87	50	2.0	2.07	3.54	30.90
1	3	15.04	21.922	15.96	6.26						
C	3										
1	6	15.02	22.375	16.31	6.25	0.86	50	2.0	2.48	3.30	12.70
A	7										
1	9	13.50	30.839	23.10	6.43	0.86	38	1.7	1.79	3.58	0.42
1	14	10.95	31.668	24.22	6.83						
1	18	10.34	31.903	24.50	6.53						
1	23	10.00	32.043	24.67	6.23						
1	28	9.62	32.166	24.83	5.88						
1	37	8.99	32.470	25.16	5.43						
1	55	8.70	32.768	25.44	5.05						
1	74	8.35	33.219	25.85	4.22						
1	92	7.97	33.631	26.23	2.91						
1	110	7.20	33.877	26.53	1.88						
1	129	6.84	33.938	26.63	1.62						
1	147	6.60	33.956	26.67	1.75						

STATION 288-040 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.06		21.917		15.95	1165.7	0.000	6.27	
10	12.91	0.05	31.692	0.427	23.87	404.2	0.079	6.54	0.03
20	10.18	0.02	31.970	0.006	24.58	336.8	0.116	6.41	0.01
30	9.46	0.01	32.233	0.006	24.90	306.4	0.148	5.76	0.00
50	8.72	0.04	32.690	0.018	25.38	261.0	0.205	5.14	0.04
75	8.33	0.00	33.244	0.001	25.87	215.4	0.264	4.15	0.01
100	7.63	0.03	33.762	0.001	26.38	167.3	0.312	2.39	0.02

STATION 288-041 OBSERVED VALUES

DATE 6/16/61 HR 21 LAT 45-44N LONG 124-42W SDG 263 WEA 03
 SEC DI 3 BA 11 CL 3 AMT 1 DRY 17.8 WET 15.6 RELHU 80 VIS 6
 WVEL 13 DIR 35 SEA 4 DIR 35 SWL 5 DIR WA 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	15.51	21.980	15.91	6.42	0.41	46	0.5	4.30	
A	1	3	15.50	21.982	15.91	6.43	0.40	45	0.2	4.19	
A	1	4	15.42	22.016	15.95	6.42	0.43	44	2.25	3.13	
A	1	6	13.34	25.229	18.82	6.24	0.60	34	0.72	0.77	
	1	15	13.20	32.124	24.15	6.18	0.56	6	0.1		
	1	20	11.52	32.013	24.38	6.57	0.70	9	0.4		
	1	25	10.76	32.115	24.60	6.63	0.60	11	0.5		
	1	30	10.30	32.282	24.80	6.52	0.80	11	0.8		
	1	39	9.84	32.516	25.06	6.46	0.90	11	3.2		
	1	59	8.85	32.576	25.27	6.08	1.03	16	8.3		
	1	79	8.38	33.145	25.78	4.50	1.74	28	18.9		
	1	99	8.00	33.579	26.18	3.33	2.02	41	30.4		
	1	118	7.64	33.781	26.39	2.71	2.32	48	33.5		
	1	138	7.12	33.903	26.56	2.32	2.24	50	35.2		
	1	177	6.64	33.962	26.67	2.21	2.72	52	33.5		

STATION 288-041 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.51		21.970		15.91	1169.7	0.000	6.42	
10	13.34		25.229		18.82	889.0	0.103	6.24	
20	11.52		32.013		24.38	355.9	0.166	6.57	
30	10.30		32.282		24.80	315.9	0.199	6.52	
50	9.26	0.02	32.557	0.047	25.19	279.6	0.259	6.35	0.04
75	8.45	0.01	33.016	0.017	25.67	234.0	0.323	4.85	0.04
100	7.98	0.00	33.593	0.001	26.19	184.8	0.375	3.29	0.00
150	6.90	0.00	33.946	0.000	26.62	144.5	0.458	2.19	0.00

STATION 288-042 OBSERVED VALUES

DATE 6/17/61		HR 01	LAT 45-53N		LONG 124-50W	SDG 713	WEA 03				
SECDI 6	BA 12	CL 6	AMT 7	DRY 15.4	WET 14.4	RELHU 90	VIS 6				
WVEL 13	DIR 34	SEA 3	DIR 35	SWL 5	DIR 35	BTM CODE 1	WA 10.00				
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	15.50	24.840	18.10	6.37				1.22	3.35	
A	2	15.46	24.871	18.13	6.45				1.05	2.71	
A	7	12.84	31.280	23.57	6.48				1.09	2.58	
A	10	11.52	32.262	24.58	6.75				0.35	0.53	
	15										
	20										
	30	9.70	34.463	26.60	6.43						
	40	9.24	32.543	25.18	6.28						
	50	8.94	32.566	25.25	6.09						
	75	8.73	33.050	25.66	4.86						
	100	8.24	33.581	26.15	3.47						
	125	7.96	33.747	26.32	3.11						
	150	7.59	33.836	26.44	2.64						
	175	7.06	33.917	26.58	2.30						
	197	6.81	33.953	26.64	2.46						
1	200	6.72	33.962	26.66	2.11						
2	246	6.36	33.987	26.73	2.13						
1	287	6.10	34.017	26.79	1.65						
	409	5.46	34.074	26.91	1.05						
1	484	4.96	34.150	27.03	0.63						
1	587	4.64	34.221	27.12	0.44						
1	690	4.32	34.285	27.21	0.54						

STATION 288-042 INTERPOLATED AND COMPUTED VALUES									
DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.50		34.840		18.10	958.2	0.000	6.37	
10	12.84		31.280		23.57	433.3	0.070	6.48	
20	11.52		32.262		24.58	337.6	0.109	6.75	
30	9.70		34.463		26.60	144.9	0.133	6.43	
50	8.94		32.566		25.25	274.2	0.175	6.09	
75	8.73		33.050		25.66	235.6	0.238	4.86	
100	8.24		33.581		26.15	189.4	0.291	3.47	
150	7.59		33.836		26.44	162.1	0.379	2.46	
200	6.72		33.962		26.66	141.7	0.455	2.11	0.01
250	6.33	0.00	33.990	0.000	26.73	135.3	0.525	2.09	0.01
300	6.03	0.01	34.022	0.002	26.80	129.7	0.591	1.56	0.02
400	5.51	0.00	34.069	0.001	26.90	120.9	0.716	1.07	0.02
500	4.90	0.01	34.163	0.001	27.05	107.7	0.830	0.58	0.00
600	4.60	---	34.229	---	27.13	100.3	0.934	0.44	---

M

STATION 288-043 OBSERVED VALUES

DATE 6/17/61 HR 06 LAT 45-44N LONG 125-00W SDG 1372 WEA 03
 SEC'D 3 BA 09 CL 5 AMT 7 DRY 15.6 WET 13.9 RELHU 83 VIS 6
 WVEL 10 DIR 35 SEA 3 DIR 35 SWL 5 DIR 35 WA 40.15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	2	0	15.86	20.970	15.07	6.45					
A	1								1.81	2.11	
A	4								1.73	2.23	
									1.15	1.69	
A	2	5	15.64	21.032	15.16	6.40					
	8								0.45	0.95	
2	10	13.49	32.114	24.08	6.66						
2	19	12.58	32.332	24.43	6.45						
2	29	10.83	32.472	24.86	7.21						
2	39	9.94	32.525	25.05	6.64						
2	48	9.48	32.549	25.15	6.32						
2	73	8.98	32.725	25.36	4.70						
2	97	8.53	33.266	25.86	4.35						
2	122	8.12	33.660	26.23	3.42						
2	145	7.74	33.819	26.41							
2	169	7.22	33.904	26.55	2.35						
2	193	6.80	33.966	26.65							
1	197	6.92	33.968	26.64	2.25						
1	232	6.29	34.001	26.75	1.98						
1	260	6.08	34.005	26.78	1.70						
1	338	5.56	34.069	26.89	1.15						
1	490	5.06	34.146	27.01	0.73						
1	655	4.60	34.227	27.13	0.48						
1	830	4.12	34.329	27.26	0.69						
1	1018	3.60	34.408	27.38	0.38						

STATION 288-043 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.86		20.960		15.07	1251.2	0.000	6.45	
10	13.49		32.114		24.08	384.1	0.082	6.66	
20	12.40	0.02	32.350	0.000	24.48	346.7	0.119	6.53	0.04
30	10.71	0.01	32.470	0.001	24.89	308.0	0.152	7.18	0.02
50	9.42	0.01	32.553	0.003	25.16	282.3	0.211	6.19	0.03
75	8.94	0.00	32.766	0.007	25.40	259.7	0.278	4.66	0.02
100	8.48	0.00	33.324	0.001	25.91	212.0	0.337	4.25	0.01
150	7.63	0.01	33.841	0.002	26.44	162.3	0.431	2.66	0.01
200	6.69	0.00	33.977	0.001	26.68	140.3	0.507	2.23	0.00
250	6.14	0.01	34.004	0.001	26.77	131.8	0.575	1.81	0.02
300	5.80	0.00	34.034	0.004	26.84	125.9	0.639	1.39	0.00
400	5.31	0.02	34.104	0.002	26.95	115.9	0.760	0.92	0.03
500	5.03	0.00	34.151	0.000	27.02	110.2	0.873	0.71	0.00
600	4.75	0.00	34.199	0.001	27.09	104.3	0.980	0.53	0.01
700	4.48	0.00	34.254	0.001	27.16	98.0	1.081	0.53	0.03
800	4.20	0.00	34.312	0.001	27.24	91.3	1.176	0.65	0.02
1000	3.65	-.---	34.402	-.---	27.37	79.9	1.347	0.43	-.---

M

STATION 288-044 OBSERVED VALUES

DATE	6/17/61	HR	12	LAT	45-53N	LONG	125-07W	SDG	1500	WEA	02
SECD1	7	BA	12	CL	X	AMT	0	DRY	14.4	WET	13.1
WVEL	13	DIR	34	SEA	4	DIR	34	SWL	5	DIR	35
								WA	42.40		
CAST	DEPTH	TEMP.		SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I
P	2	0	15.34	27.692	20.31	5.92	0.29	18	0.5	0.61	6.84
A	3								0.33	0.65	
	4	15.17	29.602	21.81	6.09	0.44	13	0.0	0.27		
	8	13.96	32.104	23.98	6.18	0.48		0.0			
A	10							0.0	0.26	0.71	
	15	12.32	32.304	24.46	6.54	0.50		0.0	0.24	0.58	
A	19										
	23	11.34	32.467	24.77	7.47	0.58		0.0			
2	38	10.43	32.578	25.01	6.69	0.70	2	0.9			
2	57	9.79	32.643	25.17	5.92	1.04	8	6.8			
2	77	9.60	32.697	25.24	5.87	1.17	9				
	96	9.35	33.141	25.63	4.63	1.47	22	16.8			
2	115	9.13	33.430	25.89	3.89	1.74	28	21.7			
2	134	8.42	33.646	26.17	3.40	2.01	35	23.1			
2	153	7.96	33.778	26.62	2.93	2.19	40	28.4			
	230	6.92	33.942	26.62	2.35	2.40	51	34.2			
1	315	6.20	33.986	26.75	1.86	2.63	62	36.4			
1	490	5.10	34.091	26.97	0.84	3.02	83	43.4			
1	707	4.48	34.258	27.17	0.34	3.24	104	43.2			
	926	3.82	34.372	27.33	0.26	3.34	128	44.4			
1	1191	3.03	34.476	27.49	0.48	3.47	146	44.4			

STATION 288-044 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.34	0.00	27.692		20.31	745.1	0.000	5.92	
10	13.42	0.00	32.435	0.179	24.35	359.2	0.056	6.25	0.01
20	11.63	0.02	32.414	0.000	24.67	328.3	0.090	7.14	0.06
30	10.82	0.04	32.538	0.008	24.91	305.5	0.122	7.30	0.14
50	9.97	0.00	32.625	0.003	25.13	285.6	0.181	6.15	0.02
75	9.61	0.01	32.682	0.007	25.23	276.2	0.251	5.89	0.03
100	9.40	0.04	33.115	0.049	25.60	241.3	0.316	4.74	0.15
150	8.02	0.00	33.761	0.001	26.32	173.7	0.420	3.00	0.00
200	7.20	0.06	33.928	0.024	26.57	150.6	0.501	2.46	0.07
250	6.72	0.01	33.961	0.006	26.66	142.5	0.574	2.22	0.01
300	6.27	0.04	34.003	0.022	26.75	134.1	0.643	1.85	0.07
400	5.60	0.00	34.034	0.000	26.86	124.7	0.772	1.33	0.02
500	5.06	0.01	34.099	0.001	26.98	114.4	0.892	0.80	0.00
600	4.74	0.04	34.176	0.004	27.07	105.8	1.002	0.51	0.02
700	4.49	0.00	34.253	0.000	27.16	98.3	1.104	0.35	0.00
800	4.20	0.00	34.311	0.001	27.24	91.4	1.199	0.27	0.01
1000	3.60	---	34.405	----	27.38	79.1	1.369	0.29	---

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STATION 288-045 OBSERVED VALUES

DATE 6/17/61 HR 15 LAT 46-04N LONG 125-22W SDG 1646 WEA 02
 SECD 16 BA 11 CLX 0 DRY 14.5 WET 13.9 RELHU 94 VIS 7
 WVEL 10 DIR 34 SEA DIR 34 SWL 5 DIR 35 WA 18

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	14.54	31.452	23.36	6.13				0.21	1.00	
A	5	14.54	31.452	23.36	5.90				0.21	1.14	
	6										
	10	14.49	31.635	23.51	5.89						
A	19	13.72	32.225	24.12	6.18						
	21										
A	29	11.06	32.501	24.84	7.12				0.20	0.69	
	42										
A	48	10.11	32.617	25.10	6.26				0.55	1.18	
	71	9.78	32.691	25.21	5.69						
	95	9.62	32.937	25.43	5.51						
	119	9.17	33.388	25.85	4.03						
	143	8.51	33.608	26.13	3.42						
	166	8.15	33.718	26.27	3.18						
	190	7.76	33.977	26.53	2.80						
	285	6.53	33.975	26.70	2.05						

STATION 288-045 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	14.54		31.452		23.36	452.9	0.000	6.13	
10	14.49		31.635		23.51	438.8	0.045	5.89	
20	13.46	0.05	32.265	0.004	24.21	372.7	0.086	6.28	0.02
30	10.94	0.04	32.514	0.004	24.88	309.2	0.120	7.11	0.03
50	10.06	0.01	32.622	0.003	25.11	287.3	0.179	6.19	0.00
75	9.76	0.01	32.719	0.001	25.23	275.8	0.250	5.69	0.04
100	9.55	0.00	33.032	0.012	25.51	249.8	0.315	5.22	0.06
150	8.39	0.01	33.630	0.008	26.17	188.1	0.425	3.34	0.02
200	7.61	---	34.054	---	26.61	146.9	0.509	2.66	---
250	6.92	---	34.167	---	26.79	130.0	0.578	2.19	---

STATION 288-046 OBSERVED VALUES

DATE 6/17/61 HR 17 LAT 46-09N LONG 125-09W SDG 1463 WEA 00
 SECDI 10 BA 10 CL 0 AMT 0 DRY WET VIS
 WVEL 6 DIR 35 SEA 3 DIR 35 SWL 4 DIR 35 WA

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A	0					0.66	4	5.7	0.22	0.84	7.16
A	4					0.74	6	0.0	0.36	1.06	8.26
A	14					0.88	6	0.0	0.11	0.71	2.06
A	28								0.28	0.45	0.20

STATION 288-046 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

STATION 288-047 OBSERVED VALUES

DATE 6/17/61 HR 13 LAT 46-26N LONG 124-40W SDG 1152 WEA 02
 SECID 11 BA 10 CL AMT 0 DRY 16.1 WET 15.0 RELHU 89 VIS 7
 WVEL 8 DIR 34 SEA 4 DIR 34 SWL 5 DIR 35 BTM CODE 1 WA 12

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	29.382	21.64	6.05	0.37	10		0.26	1.14	
A	4	15.16	29.382	21.64	6.05	0.37	10		0.22	0.83	
	5	15.10	29.339	21.62	6.08	0.40	10	1.7			
	10	13.06	31.895	24.00	6.47	0.56	5	1.6	0.22	0.78	
A	15	10.68	32.433	24.86	7.03	0.68	4	0.9			
	20	9.64	32.501	25.08	6.56	0.93	7	5.0			
	29										
	30								0.75	1.25	
A	30	8.89	32.577	25.26	6.13	1.13	10	9.4			
	49	8.30	33.395	25.99	4.03	1.96	30	24.1			
	73	8.14	33.656	26.22	3.29	1.92	35	29.0			
	98										
	122	7.50	33.817	26.44	2.49	2.16	46	33.0			
	147	7.10	33.909	26.57	2.16	2.43	52	34.8			
	171	6.58	33.947	26.67	1.96	2.46	55	35.7			
	196	6.58	33.974	26.69	1.67	2.61	58	36.0			
	293	5.87	34.034	26.83	1.23	2.60	68	38.2			

STATION 288-047 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	15.16		29.382		21.64	617.3	0.000	6.05	
10	13.06		31.895		24.00	392.1	0.051	6.47	
20	10.68		32.433		24.86	310.7	0.086	7.03	
30	9.57	0.02	32.499	0.005	25.09	288.3	0.116	6.54	0.02
50	8.86	0.00	32.609	0.009	25.29	269.8	0.172	6.05	0.02
75	8.29	0.01	33.429	0.006	26.02	201.0	0.231	3.95	0.02
100	8.09	0.01	33.672	0.000	26.24	180.5	0.278	3.22	0.01
150	7.02	0.01	33.915	0.001	26.58	148.5	0.361	2.13	0.00
200	6.57	---	33.978	---	26.69	138.6	0.432	1.63	---
250	6.32	---	34.016	---	26.76	133.2	0.500	1.29	---

STATION 288-048 OBSERVED VALUES

DATE 6/18/61 HR 04 LAT 46-42N LONG 124-13W SDG 42 WEA 10
 SECD 7 BA CL AMT 0 DRY 13.9 WET 13.1 RELHU 92 VIS 7
 WVEL 6 DIR 18 SEA 2 DIR 18 SWL 2 DIR 30 WA 00

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	11.68	31.072	23.62	6.51				4.24	2.07	
	3	11.21	31.157	23.77	6.08				3.44	5.09	
P	1	11.09	31.365	23.96	5.60				1.13	4.24	
	10	10.10	31.830	24.49	4.94						
	15	9.35	32.250	24.93	4.41						
A	19								1.19	1.66	
	20	8.65	32.807	25.48	3.71						
	25	8.42	33.230	25.84	2.90						
	30	8.00	33.531	26.14	2.40						
	35	7.84	33.647	26.26	2.06						

STATION 288-048 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	11.68		31.072		23.62	427.8	0.000	6.51	
10	10.10		31.820		24.49	345.8	0.039	4.94	
20	8.65		32.807		25.48	251.5	0.069	3.71	
30	8.00		33.531		26.14	188.5	0.091	2.40	

STATION 288-049 OBSERVED VALUES

DATE 6/18/61 HR 07 LAT 46-54N LONG 124-16W SDG 39 WEA 02
 SECD1 BA 11 CL X AMT 0 DRY 15.0 WET 13.9 RELHU 89 VIS 7
 WVEL 9 DIR 18 SEA 2 DIR 35 SWL 2 DIR 35 WA 10

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	13.22	30.906	23.21	7.41		32				
1	3	13.21	30.913	23.21	7.41	0.62	15	1.7			
1	6	12.40	31.273	23.65	6.56	0.97	21	6.5			
1	10	11.31	31.783	24.24	5.45	1.36	30	14.1			
1	15	10.86	31.734	24.28	5.35	1.49	30	15.2			
1	20	9.82	31.865	24.56	4.80	1.72	34	19.5			
1	25	8.36	33.130	25.77	3.20	2.24	42	26.7			
1	30	7.95	33.429	26.07	2.90	2.23	48	28.8			
1	34	7.88	33.490	26.13	2.89	2.40	46	29.7			

STATION 288-049 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.22		30.906		23.21	467.6	0.000	7.41	
10	11.31		31.783		24.24	369.1	0.042	5.45	
20	9.82		31.865		24.56	339.0	0.078	4.80	
30	7.95		33.429		26.07	195.4	0.104	2.90	

STATION 288-050 OBSERVED VALUES

DATE 6/18/61 HR 09 LAT 47-10N LONG 124-21W SDG 43 WEA 03
 SECD1 BA 14 CL AMT 8 DRY 13.3 WET 12.8 RELHU 95 VIS 5
 WVEL 10 DIR 17 SEA 3 DIR 17 SWL 1 DIR 17 WA 15

CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
1	0	13.16	31.093	23.36	7.77	0.68	11	0.9			
1	3	13.12	31.104	23.38	7.78	0.50	10	0.9			
1	6	13.03	31.119	23.41	7.63	0.44	10	0.9			
1	10	10.46	31.837	24.43	5.30	1.66		18.4			
1	14	9.83	32.058	24.71	4.69	1.77	36	20.5			
1	19	8.52	32.579	25.32	3.67	2.12	42	28.0			
1	29	7.56	33.737	26.37	2.05	2.52	58	34.0			
1	34	7.55	33.732	26.37	2.02	2.54	56	33.8			

STATION 288-050 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPOT. ANOMALY	OXY.	E(O)
0	13.16		31.093		23.36	452.7	0.000	7.77	
10	10.46		31.837		24.43	351.0	0.041	5.30	
20	8.44	0.04	32.693	0.002	25.42	256.9	0.071	3.66	0.06
30	7.50	-0.01	33.782	-0.001	26.41	163.0	0.092	2.04	-0.01

STATION 288-50X OBSERVED VALUES

DATE 6/18/61 HR 12 LAT 47-20N LONG 124-36W SDG RELHU WEA
 SECD1 BA CL AMT DRY 12.4 WET 12.4 VIS
 WVEL 10 DIR 17 SEA 3 DIR 17 SWL 1 DIR 17 WA 15

DEPTH	CHL-A	PROD-I	PROD-S
0		7.12	62.86

STATION 288-051 OBSERVED VALUES

DATE	6/18/61	HR	15	LAT	47-36N	LONG	124-51W	SDG	110	WEA	03
SECD	1	BA	15	CL	9	DRY	14.4	WET	13.6	RELHU	92
WVEL	9	DIR	14	SEA	DIR	SWL	2	DIR	14	BTM	CODE
CAST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
P	1	0	13.88	30.642	22.87	6.76	0.57	24	1.2	7.25	
A	1	3	13.87	30.634	22.87	6.74	0.60	25	0.6	6.16	
A	1	6	13.87	30.643	22.88	6.72	0.57	24	0.8	4.95	
	7										
	10	13.66	30.679	22.95	6.72	0.62	23	1.3			
	15	11.73	31.467	23.92	6.68	0.98	22	6.1	0.94		
P	1	15									
	20	9.76	32.014	24.68	5.68	1.22	20	10.7			
	29	9.18	32.334	25.03	5.69	1.38	17	12.2			
	39	8.55	32.596	25.33	4.18	1.19		12.3			
	59	8.14	33.284	25.93	3.61	1.64	29	24.5			
	79	7.94	33.521	26.14	2.26	1.88	30	23.8			
	98	7.23	33.845	26.50	2.52	2.22	50	35.5			

STATION 288-051 INTERPOLATED AND COMPUTED VALUES

DEPTH	TEMP.	E(T)	SAL.	E(S)	SIGMA-T	SP.VOL. ANOMALY	GEOPT. ANOMALY	OXY.	E(O)
0	13.88		30.642		22.87	499.5	0.000	6.76	
10	13.66		30.679		22.95	492.8	0.050	6.72	
20	9.76		32.014		24.68	327.0	0.091	5.68	
30	9.11	0.00	32.361	0.002	25.06	291.6	0.122	5.56	0.04
50	8.24	0.04	32.989	0.028	25.68	232.6	0.174	3.71	0.17
75	7.99	0.02	33.487	0.015	26.11	192.4	0.228	2.49	0.07

STATION 288-052 OBSERVED VALUES

DATE	6/18/61	HR	19	LAT	48-10N	LONG	124-56W	SDG	80	WEA	10
SECDI	BA	18	CL	AMT	DRY	WET	RELHU	WA			
WVEL	17	DIR	SEA	DIR	17	SWL	DIR				
CST	DEPTH	TEMP.	SAL.	SIGMA-T	OXY.	PHOS.	SIL.	NITR.	CHL-A	PROD-I	PROD-S
A		0				1.70	42	16.5	2.78	9.36	74.42
A		2				1.70	44	16.8	4.13	8.39	74.16
A		7				1.56	1	10.8	3.89	8.36	25.08
A		14				1.70	26	15.9	0.89	1.84	1.58

STATION 288-052 INTERPOLATED AND COMPUTED VALUES

NO INTERPOLATED AND COMPUTED VALUES

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